

# Theory Test

## Units 6-10

### Triads

#### *The Triad*

The **triad** is a \_\_\_\_\_ note chord.

#### *The 4 different Triad types*

There are 4 different chord types that are written as triads. These are:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

#### *Major Triad*

The formula for a **major triad** is:

- \_\_\_\_\_ of the major scale.
- Build a **major** triad on each of the root notes given below.

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#### *The Minor Triad*

The formula for the **minor triad** is:

- \_\_\_\_\_ of the major scale.
- Build a **minor** triad on each of the given root notes.

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#### *The Augmented Triad*

The formula for the **augmented triad** is:

- \_\_\_\_\_ of the major scale.
- Build **augmented triads** on the following root notes.

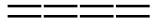
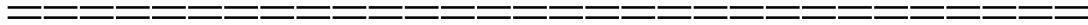
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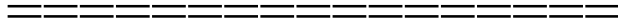
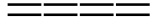
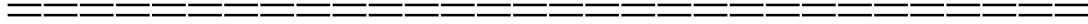
#### *The Diminished Triad*

The formula for the **diminished triad** is:

- \_\_\_\_\_ of the major scale.
- Build **diminished triads** from the given root notes.



- Name the triads on the staff below.



- Spell out the triads on the chart below by filling in the blanks.

| Triad | D  | Em | Cm | Gdim | Ab | B aug | Cm | F |
|-------|----|----|----|------|----|-------|----|---|
| 1     | D  |    |    |      |    |       |    |   |
| 3     | F# |    | Eb |      |    |       |    | A |
| 5     | A  | B  |    |      |    | G     | G  |   |

| Triad | Bb | D | Am | G dim | A aug | Eb | Em | F# |
|-------|----|---|----|-------|-------|----|----|----|
| 1     | Bb |   |    |       |       |    |    |    |
| 3     |    |   |    |       |       |    | G  | A# |
| 5     |    |   | E  | Db    | F     |    |    |    |

| Triad | Bm | Db | Bb dim | E aug | Fm | D aug | A  | G |
|-------|----|----|--------|-------|----|-------|----|---|
| 1     |    |    |        |       |    |       |    |   |
| 3     |    | F  |        |       |    | F#    | C# |   |
| 5     |    |    |        | C     |    |       |    | D |

# Unit Seven

## Harmonizing the Major scale in Triads

### Harmonizing the Scale

- Write a C major scale on the staff below.
- Number the scale steps (degrees) 1-8.
- Above the note C write the 3rd and 5th notes of the scale.
- What **type** of triad have you formed?  
Major, minor, diminished, or augmented.
- Write the name below the triad.
- Follow this same process with the other scale steps, in each case put a 3rd and 5th above the scale tone.



- Which of the triads on the staff above are **major** in quality? Write the scale degree number.  
\_\_\_\_\_
- Which triads are **minor** in quality? \_\_\_\_\_
- Which triad is **diminished** in quality? \_\_\_\_\_

### Tonal Harmony

The chords that result from this process form the basis of \_\_\_\_\_.

### Formula of Major Scale Triad Qualities

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
|   |   |   |   |   |   |   |

- Write out the names of the triads in each key listed in the following table.

|              | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------------|---|---|---|---|---|---|---|
| <b>C ma</b>  |   |   |   |   |   |   |   |
| <b>F ma</b>  |   |   |   |   |   |   |   |
| <b>Bb ma</b> |   |   |   |   |   |   |   |
| <b>Eb ma</b> |   |   |   |   |   |   |   |
| <b>Ab ma</b> |   |   |   |   |   |   |   |
| <b>Db ma</b> |   |   |   |   |   |   |   |
| <b>Gb ma</b> |   |   |   |   |   |   |   |
| <b>G ma</b>  |   |   |   |   |   |   |   |
| <b>D ma</b>  |   |   |   |   |   |   |   |
| <b>A ma</b>  |   |   |   |   |   |   |   |
| <b>E ma</b>  |   |   |   |   |   |   |   |
| <b>B ma</b>  |   |   |   |   |   |   |   |
| <b>F# ma</b> |   |   |   |   |   |   |   |
| <b>C# ma</b> |   |   |   |   |   |   |   |

- Name the **"5" chord** in each of these keys.

| Key       | "5" chord |
|-----------|-----------|
| <b>C</b>  | <b>G</b>  |
| <b>A</b>  |           |
| <b>F#</b> |           |
| <b>Eb</b> |           |
| <b>D</b>  |           |
| <b>B</b>  |           |
| <b>Ab</b> |           |
| <b>F</b>  |           |
| <b>E</b>  |           |
| <b>Db</b> |           |
| <b>Bb</b> |           |
| <b>G</b>  |           |

- Name the **"3" chord** in each of the following keys.

| Key       | "3" chord |
|-----------|-----------|
| <b>C</b>  | <b>Em</b> |
| <b>A</b>  |           |
| <b>F#</b> |           |
| <b>Eb</b> |           |
| <b>D</b>  |           |
| <b>B</b>  |           |
| <b>Ab</b> |           |
| <b>F</b>  |           |
| <b>E</b>  |           |
| <b>C#</b> |           |
| <b>Bb</b> |           |
| <b>G</b>  |           |

- Fill in the blanks.

| Key       | "6" chord  |
|-----------|------------|
| <b>C</b>  | <b>Am</b>  |
|           | <b>Bm</b>  |
| <b>F</b>  |            |
|           | <b>F#m</b> |
| <b>Ab</b> |            |
|           | <b>Ebm</b> |
| <b>Bb</b> |            |
|           | <b>Em</b>  |
| <b>Db</b> |            |
|           | <b>C#m</b> |
| <b>Eb</b> |            |
|           | <b>G#m</b> |

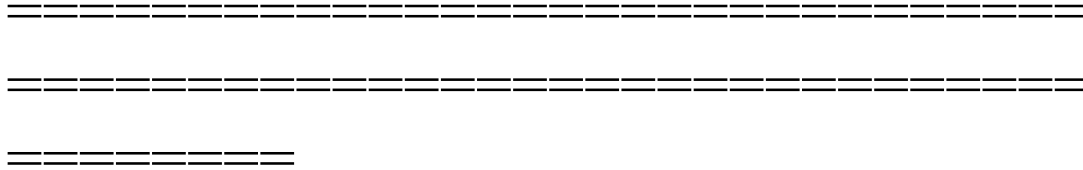
- Fill in the blanks.

| Key | "4" chord |
|-----|-----------|
|     | <b>C</b>  |
|     | <b>A</b>  |
|     | <b>Gb</b> |
|     | <b>Eb</b> |
|     | <b>D</b>  |
|     | <b>Cb</b> |
|     | <b>Ab</b> |
|     | <b>F</b>  |
|     | <b>E</b>  |
|     | <b>Db</b> |
|     | <b>Bb</b> |
|     | <b>G</b>  |

- Fill in the blanks.

| Key       | "2" chord  |
|-----------|------------|
|           | <b>Cm</b>  |
| <b>A</b>  |            |
| <b>Gb</b> |            |
|           | <b>Ebm</b> |
| <b>D</b>  |            |
|           | <b>Bm</b>  |
| <b>Ab</b> |            |
| <b>F</b>  |            |
|           | <b>Em</b>  |
| <b>Db</b> |            |
|           | <b>Bbm</b> |
|           | <b>Gm</b>  |

- On the staff below are some chord progressions.
- Write in **scale step numbers** for each one.



**Triad Review**

- Name the 5th of each triad.

| Triad | 5th of triad | Triad  | 5th of triad |
|-------|--------------|--------|--------------|
| C     | G            | Em     |              |
| Ddim  |              | G      |              |
| Dbmi  |              | D      |              |
| A aug |              | G aug  |              |
| Bb    |              | C dim  |              |
| F     |              | Eb dim |              |
| Dm    |              | B      |              |
| Am    |              | B aug  |              |
| Abdim |              | B dim  |              |
| Gm    |              | Bm     |              |
| Fm    |              | Ab     |              |
| C aug |              | Gbm    |              |
| Abm   |              | F#m    |              |
| A     |              | E      |              |

# Unit Eight

## The Minor Scale

### Minor Scales

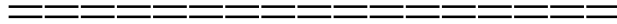
#### Interval Formula for the Natural Minor Scale

The numbers below represent the distance, (in half-steps), between the notes in a natural minor scale.

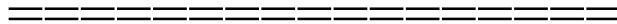
2    1    2    2    1    2    2

- Build **natural minor scales** using the root notes indicated.
- These will require only sharps.

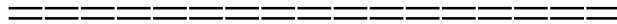
#### Key of E minor



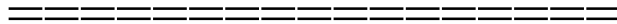
#### Key of B minor



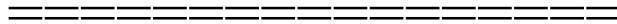
#### Key of F# minor



#### Key of C# minor



#### Key of G# minor



**Key of D#minor**



- Build the natural minor scales in the keys indicated.
- These require the use of flats only.
- Write the key signature next to the clef sign.

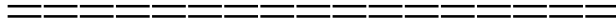
**Key of D minor**



**Key of Gminor**



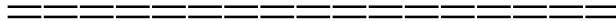
**Key of Cminor**



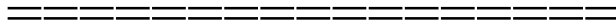
**Key of Fminor**



**Key of Bbminor**



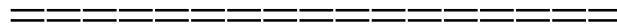
**Key of Ebminor**



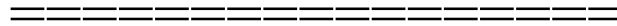


**Minor Key Signatures**

- Write the key signature for the scales listed below.



**Am Em Bm F#m C#m G#m D#m**



**Am Dm Gm Cm Fm Bbm Ebm**

**Relative Major and Minor Keys**

- Name the **relative minor key** of those listed.

| Major key | Relative minor key |
|-----------|--------------------|
| C         |                    |
| G         |                    |
| D         |                    |
| A         |                    |
| E         |                    |
| B         |                    |
| F#        |                    |
| F         |                    |
| Bb        |                    |
| Eb        |                    |
| Ab        |                    |
| Db        |                    |
| Gb        |                    |

- Name the **relative major key** of those listed.

| Major key | Relative minor key |
|-----------|--------------------|
|           | Cm                 |
|           | Gm                 |
|           | Dm                 |
|           | Am                 |
|           | Em                 |
|           | Bm                 |
|           | F#m                |
|           | C#m                |
|           | G#m                |
|           | D#m                |
|           | Bbm                |
|           | Ebm                |
|           | Fm                 |

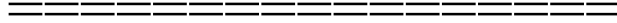
**The Harmonic Minor Scale**

- Build **harmonic minor scales** using the root notes indicated.
- Write the key signatures next to the clef sign.

**Key of E minor**



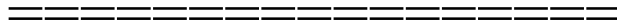
**Key of B minor**



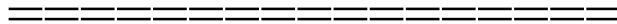
**Key of F# minor**



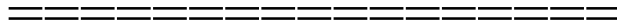
**Key of C# minor**



**Key of G# minor**

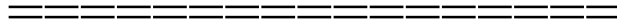


**Key of D# minor**

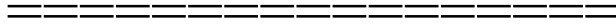


- Build the harmonic minor scales in the keys indicated.
- Write the key signature next to the clef sign.

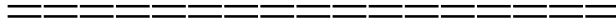
**Key of D minor**



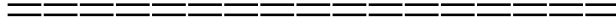
**Key of Gminor**



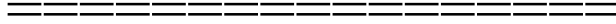
**Key of Cminor**



**Key of Fminor**



**Key of Bbminor**



**Key of Ebminor**



**The Jazz Minor Scale (ascending Melodic Minor Scale)**

- Build **jazz minor scales** using the root notes indicated.
- Write the key signatures next to the clef sign.

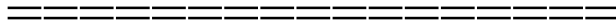
**Key of Eminor**



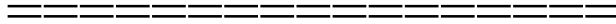
**Key of Bminor**



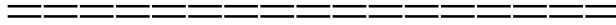
**Key of F#minor**



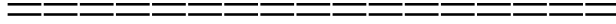
**Key of C#minor**



**Key of G#minor**

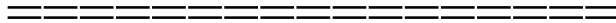


**Key of D#minor**

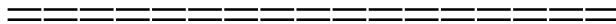


- Build the **jazz minor scales** in the keys indicated.
- Write the key signature next to the clef sign.

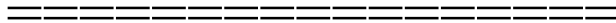
**Key of D minor**



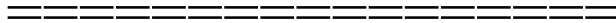
**Key of Gminor**



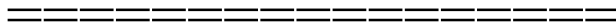
**Key of Cminor**

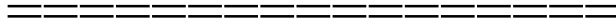


**Key of Fminor**



**Key of Bbminor**



**Key of Ebminor**

# Unit Nine

## Sevenths and Key Centres

**Seventh Chord Types****(a) The Major Seventh Chord**

- The **major seventh chord** (Ma7) formula is:

**(b) The Minor Seventh Chord**

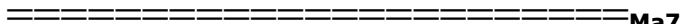
- The **minor seventh chord** (mi7) formula is:

**(c) The Dominant Seventh Chord**

- The **dominant seventh chord** (7) formula is:

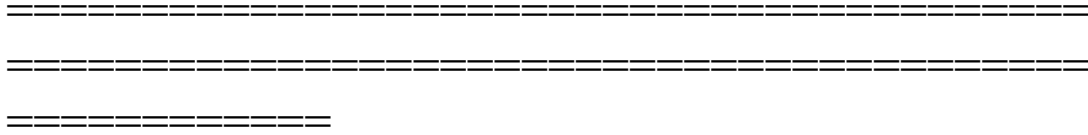
**(d) The Minor Seven Flat Five Chord**

- The **minor seven flat five chord** (m7b5) formula is:
- Write each of the seventh chords on the staff below based on a F root note.

**dom7****mi7b5****Ma7****mi7**

In most music situations the dominant seventh chord is shortened, (for convenience) to seventh (7).

- Build the chords as required on the staff below.
- Remember the scale being used is always the major scale.



- Fill in the blanks as you spell the seventh chord on the table below.

| Chord  | 1 | 3  | 5  | 7  | Chord  | 1 | 3  | 5  | 7  |
|--------|---|----|----|----|--------|---|----|----|----|
| F7     |   | A  |    |    | Abm7   |   |    | Eb |    |
| Am7    |   |    | E  |    | Db7    |   | F  |    |    |
| Bbm7b5 |   | Db |    |    | Gb Ma7 |   | Bb |    |    |
| D Ma7  |   | F# |    |    | B Ma7  |   | D# |    |    |
| E7     | E |    |    | D  | C#m7b5 |   | E  |    |    |
| Eb Ma7 |   |    |    | D  | Bm7b5  | B |    |    |    |
| Bm7    |   | D  |    |    | E7     | E |    |    |    |
| A Ma7  |   |    | E  |    | Eb7    |   | G  |    |    |
| G7     |   |    |    |    | Dm7    |   |    | A  |    |
| Gm7b5  |   | Bb |    |    | Db7    |   |    | Ab |    |
| Cm7    |   |    |    | Bb | G Ma7  |   |    | D  |    |
| Ab Ma7 |   | C  |    |    | D Ma7  |   |    |    | C# |
| D7     |   |    |    | C  | F m7   |   |    |    | Eb |
| Am7b5  |   | C  |    |    | A7     |   |    | E  |    |
| C7     | C |    |    |    | F#7    |   | A# |    |    |
| Gb7    |   |    |    | Fb | Em7b5  |   | G  |    |    |
| Dm7b5  |   |    | Ab |    | Bm7    |   | D  |    |    |
| B7     |   | D# |    |    | Am7    |   |    |    | G  |
| Em7    |   | G  |    |    | E Ma7  |   |    | B  |    |

*The Formula for Seventh Chords in Each Key*

- **The formula is:**

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

- Using the formula from the previous page, fill in the **seventh chords** in each of the following keys on the table below.

| Keys      | Chords      |             |             |             |            |            |              |
|-----------|-------------|-------------|-------------|-------------|------------|------------|--------------|
|           | I           | II          | III         | IV          | V          | VI         | VII          |
| <b>C</b>  | <b>Cma7</b> | <b>Dm7</b>  | <b>Em7</b>  | <b>Fma7</b> | <b>G7</b>  | <b>Am7</b> | <b>Bm7b5</b> |
| <b>D</b>  |             |             |             | <b>Gma7</b> |            |            |              |
| <b>E</b>  |             |             |             |             | <b>B7</b>  |            |              |
| <b>F</b>  |             |             | <b>Am7</b>  |             |            |            |              |
| <b>G</b>  |             |             |             |             |            |            |              |
| <b>A</b>  |             |             |             | <b>Dma7</b> |            |            |              |
| <b>B</b>  |             |             |             |             |            |            |              |
| <b>Bb</b> |             |             | <b>Dm7</b>  |             |            |            |              |
| <b>Eb</b> |             | <b>Fm7</b>  |             |             |            |            | <b>Dm7b5</b> |
| <b>Ab</b> |             |             |             |             | <b>Eb7</b> |            |              |
| <b>Db</b> |             |             |             |             |            |            |              |
| <b>Gb</b> |             |             |             |             |            |            |              |
| <b>F#</b> |             |             | <b>A#m7</b> |             | <b>C#7</b> |            |              |
| <b>C#</b> |             | <b>D#m7</b> |             |             |            |            |              |

**Key Centres**

A general guideline here is:

**Always find the key that the dominant chord belongs to first.**

- What is the key centre of the following progression? \_\_\_\_\_
- Write the scale step numbers under each of the chords.

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The following chord sequence contains several keys which would **not** be indicated by a change in the key signature.

- Establish the scale position (function) of each chord and write it below the chord.
- Write the key centres above the appropriate group of chords.
- Remember** to look for the **dominant 7 chord** to give you a clue to the key.

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# Unit Ten

## Inversions and Harmonizing the Minor Scale

**Inversions**

**(a) Root Position**

When the chord is written (or played) with the \_\_\_\_\_ as it's lowest note it is said to be in **root position**.

**(b) 1st Inversion**

When the chord is written (or played) with the \_\_\_\_\_ as the lowest note it is in **1st inversion**.

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**(c) 2nd Inversion**

When the chord is written (or played) with the \_\_\_\_\_ as the lowest note it is in **2nd inversion**.

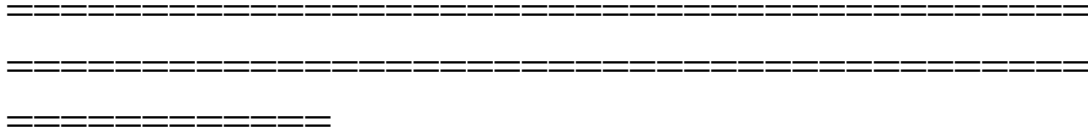
**(d) 3rd Inversion**

When the chord is written (or played) with the \_\_\_\_\_ as the lowest note it is in **3rd inversion**.

**Slash Chords**

The slash chord **always** has the \_\_\_\_\_ **on the left** and the **bass note on the right** side of the diagonal slash.

- Name the chords on the staff below as **slash** chords.
- Remember that the chord name is written to the left of the slash and the bass note to the right hand side of the slash.
- If the chord is in root position there is no need to write a separate bass note.





The notes in the boxes below that are marked 'notes' form a chord.

- Write the chord name in the box marked 'chord' or;
- Write the notes in the boxes to complete the chord spelling.

Fill in the blanks.

|              |   |                 |             |             |             |
|--------------|---|-----------------|-------------|-------------|-------------|
| <b>Chord</b> | = | <b>Note (1)</b> | <b>Note</b> | <b>Note</b> | <b>Note</b> |
|              | = | <b>Bb</b>       | <b>G</b>    | <b>D</b>    | <b>F</b>    |
| <b>Am7</b>   | = |                 | <b>C</b>    | <b>G</b>    | <b>A</b>    |
|              | = | <b>D</b>        | <b>C</b>    | <b>F#</b>   | <b>A</b>    |
|              | = | <b>A</b>        | <b>D#</b>   | <b>F#</b>   | <b>B</b>    |
| <b>Cm7</b>   | = |                 | <b>Eb</b>   | <b>G</b>    | <b>C</b>    |
|              | = | <b>G#</b>       | <b>D</b>    | <b>B</b>    | <b>E</b>    |
|              | = | <b>F</b>        | <b>C</b>    | <b>E</b>    | <b>A</b>    |
| <b>Dma7</b>  | = | <b>F#</b>       | <b>C#</b>   | <b>D</b>    |             |
|              | = | <b>Ab</b>       | <b>D</b>    | <b>F</b>    | <b>Bb</b>   |

|               |   |                 |             |             |             |
|---------------|---|-----------------|-------------|-------------|-------------|
| <b>Chord</b>  | = | <b>Note (1)</b> | <b>Note</b> | <b>Note</b> | <b>Note</b> |
| <b>Bm7b5</b>  | = | <b>B</b>        |             | <b>D</b>    |             |
| <b>A7</b>     | = | <b>C#</b>       | <b>G</b>    |             |             |
|               | = | <b>F</b>        | <b>D</b>    | <b>C</b>    | <b>A</b>    |
| <b>Dm7</b>    | = | <b>F</b>        | <b>C</b>    |             |             |
| <b>F#m7b5</b> | = |                 | <b>C</b>    | <b>A</b>    |             |
| <b>Bb7</b>    | = |                 | <b>D</b>    | <b>F</b>    | <b>Bb</b>   |
| <b>Ab7</b>    | = | <b>Ab</b>       |             |             |             |
| <b>Cma7</b>   | = |                 | <b>E</b>    | <b>B</b>    |             |
| <b>C#m7</b>   | = |                 | <b>E</b>    | <b>B</b>    |             |

- Rewrite the chord names from the above chart using the note marked in column (1) as the bass note.
- This will usually result in a slash chord notation.

**Harmonizing the Harmonic Minor Scale**

**Formula of Minor Scale Triad Qualities**

|          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|
| <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
|          |          |          |          |          |          |          |

- Using the formula above, write out the names of the triads in each key listed in the following table.

|              |             |             |             |             |            |             |             |
|--------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|
|              | <b>1</b>    | <b>2</b>    | <b>3</b>    | <b>4</b>    | <b>5</b>   | <b>6</b>    | <b>7</b>    |
| <b>C mi</b>  | <b>C mi</b> | <b>Ddim</b> | <b>Ebma</b> | <b>F mi</b> | <b>Gma</b> | <b>Abma</b> | <b>Bdim</b> |
| <b>F mi</b>  |             |             |             |             |            |             |             |
| <b>Bb mi</b> |             |             |             |             |            |             |             |
| <b>Eb mi</b> |             |             |             |             |            |             |             |
| <b>G# mi</b> |             |             |             |             |            |             |             |
| <b>C# mi</b> |             |             |             |             |            |             |             |
| <b>F# mi</b> |             |             |             |             |            |             |             |
| <b>G mi</b>  |             |             |             |             |            |             |             |
| <b>D mi</b>  |             |             |             |             |            |             |             |
| <b>A mi</b>  |             |             |             |             |            |             |             |
| <b>E mi</b>  |             |             |             |             |            |             |             |
| <b>B mi</b>  |             |             |             |             |            |             |             |

- The following questions relate to the information on the previous table.
- Do not refer to it**, but work the answers out from your knowledge of the **minor scales** and the **formula of minor scale triad qualities**.
- Name the **"5" chord** in each of these keys.

| Key         | "5" chord  |
|-------------|------------|
| <b>Cmi</b>  | <b>Gma</b> |
| <b>Ami</b>  |            |
| <b>F#mi</b> |            |
| <b>Ebmi</b> |            |
| <b>Dmi</b>  |            |
| <b>Bmi</b>  |            |
| <b>G#mi</b> |            |
| <b>Fmi</b>  |            |
| <b>Emi</b>  |            |
| <b>C#mi</b> |            |
| <b>Bbmi</b> |            |
| <b>Gmi</b>  |            |

- Name the **"3" chord** in each of the following keys.

| Key         | "3" chord |
|-------------|-----------|
| <b>Cmi</b>  | <b>Eb</b> |
| <b>Ami</b>  |           |
| <b>F#mi</b> |           |
| <b>Ebmi</b> |           |
| <b>Dmi</b>  |           |
| <b>Bmi</b>  |           |
| <b>G#mi</b> |           |
| <b>Fmi</b>  |           |
| <b>Emi</b>  |           |
| <b>C#mi</b> |           |
| <b>Bbmi</b> |           |
| <b>Gmi</b>  |           |

- Fill in the blanks.

| Key         | "6" chord |
|-------------|-----------|
| <b>Cmi</b>  | <b>Ab</b> |
|             | <b>Bb</b> |
| <b>Fmi</b>  |           |
|             | <b>F</b>  |
| <b>G#mi</b> |           |
| <b>Bbmi</b> | <b>Eb</b> |
|             | <b>E</b>  |
| <b>C#mi</b> |           |
|             | <b>Db</b> |
| <b>Ebmi</b> |           |
|             | <b>Ab</b> |

- Fill in the blanks.

| Key | "4" chord   |
|-----|-------------|
|     | <b>Cmi</b>  |
|     | <b>Ami</b>  |
|     | <b>F#mi</b> |
|     | <b>Ebmi</b> |
|     | <b>Dmi</b>  |

