**Section #1: Vocabulary (definitions) Use words and/or Draw**

| Angle bisector | Altitude | Perpendicular bisector |
|---|---|---|
| Median | Parallel lines | Perpendicular lines |
| Circumscribe | Inscribe | Congruent |
| Midpoint | Acute triangle | Obtuse triangle |
| Right triangle | Scalene triangle | Isosceles triangle |

**Section #2: Formulas/Equations/Theorems**

<u>**Write each formula**</u> **AND** <u>**show work**</u> **for each example:  (-2, 5) and (6, 10)**

**Ex. 1 Slope:**                                                   **ans.** $\dfrac{5}{8}$

**Point-slope form of a line:**_____
**Ex. 2 ) Line passing through (2, 3) and parallel to** $y = 4x - 9$

**Slope-intercept form of a line:**_____
**Ex. 3) Line passing through (0, 3) and perpendicular to** $y = 4x - 9$

# Algebra 1 review: radicals

**YOU MUST SHOW WORK to receive credit!**

**Ex. 4 Simplify** $\sqrt{160}$ **Ex. 5 Simplify** $(\sqrt{10})(\sqrt{2})$ **Ex. 6** $\sqrt{3} + \sqrt{48} + \sqrt{18}$
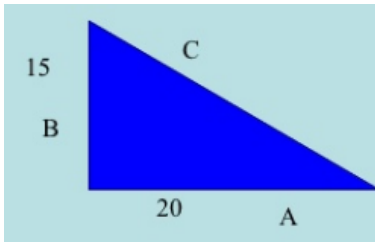
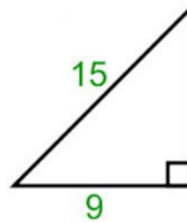*Ans.* $4\sqrt{10}$        *Ans.* $2\sqrt{5}$        *Ans.* $5\sqrt{3} + 3\sqrt{2}$

## Pythagorean theorem: YOU MUST SHOW WORK to receive credit!

**Ex. 7 Find the value of C .**             **Ex. 8 Find the length of unknown leg.**



*Ans.C = 25*             *Ans. 12*

## Distance and Midpoint formulas:  USE your notes to write each correctly!!!!!

**Write the Distance formula:**

**Ex. 9 Find the distance from (-2, 7) to (4, 9) in simplest radical form.**
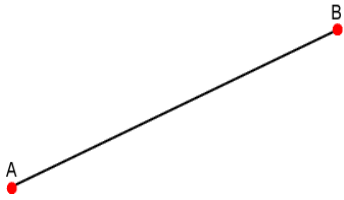
Ans. $2\sqrt{10}$

**Write the Midpoint formula:**

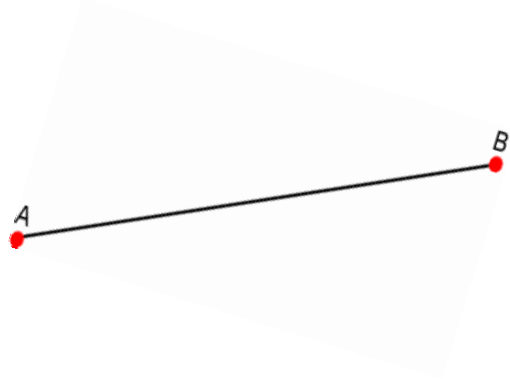**Ex. 10 Find the midpoint of** $\overline{FX}$ **with F(-1, 8) and X(11, 4)**

Ans. (5, 6)

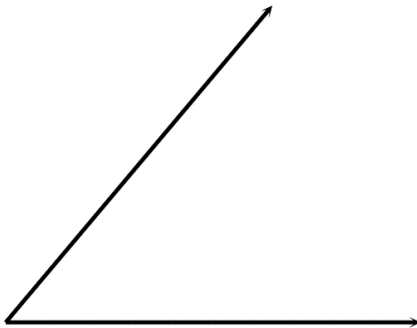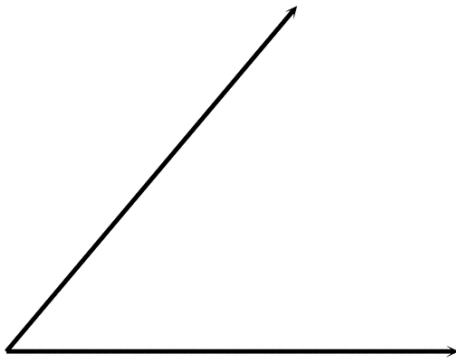**Section #3: Key methods and concepts Need help? Mathopenref.com**

1) **Copy segment AB.**
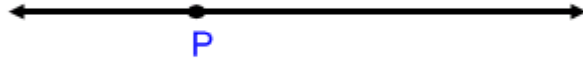
2) **Bisect segment AB.**

B

A

B

A

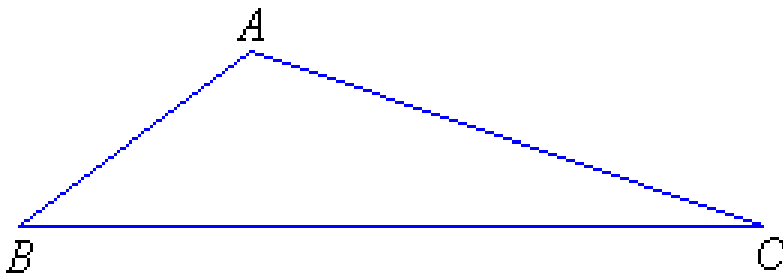3) **Copy the angle.**

4) **Bisect the angle.**

**5) Construct a line through point P that is perpendicular to the given segment.**
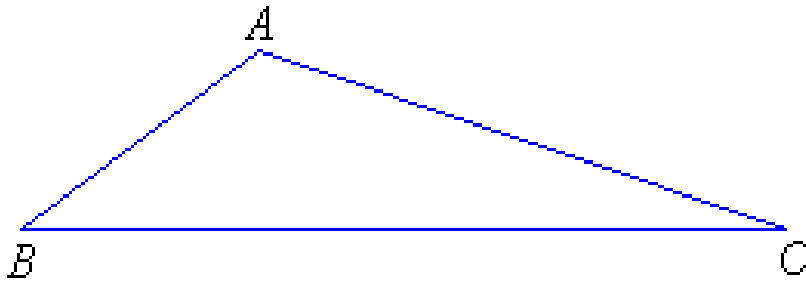
P

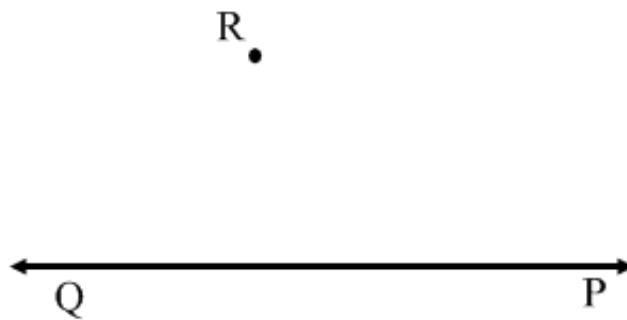**6) Construct a line through point P that is <u>perpendicular</u> to the given segment.**

P

**7) Construct the median from A to BC.**

A

B          C

**8) Construct the altitude from A to BC**



**9) Construct a line which passes through point R and is <u>parallel</u> to line QP.**



**10) Construct an isosceles triangle that is not equilateral.**

**11) <u>Inscribe</u> an equilateral triangle in a circle.**

**12) <u>Inscribe</u> a regular hexagon in a circle.**