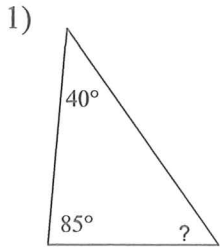


# Line + Angle Relationships Homework Key

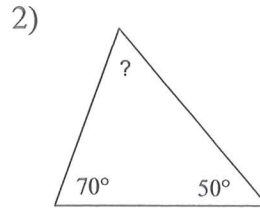
Find the measure of each angle indicated.



$$85 + 40 + x = 180$$

$$125 + x = 180$$

$$\boxed{x = 55^\circ}$$

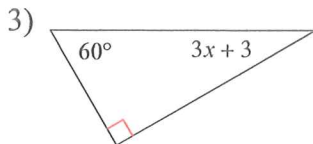


$$70 + x + 50 = 180$$

$$x + 120 = 180$$

$$\boxed{x = 60^\circ}$$

Solve for x.

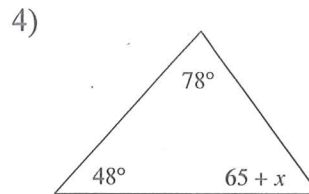


$$90 + 60 + 3x + 3 = 180$$

$$3x + 153 = 180$$

$$3x = 27$$

$$\boxed{x = 9}$$



$$48 + 78 + 65 + x = 180$$

$$191 + x = 180$$

$$\boxed{x = -11}$$

Name: \_\_\_\_\_

Key

### Simplifying Radicals Review

1.  $\sqrt{12}$

$2\sqrt{3}$

2.  $\sqrt{24}$

$2\sqrt{6}$

3.  $\sqrt{54}$

$3\sqrt{6}$

4.  $\sqrt{18}$

$3\sqrt{2}$

5.  $\sqrt{48}$

$4\sqrt{3}$

6.  $\sqrt{28}$

$2\sqrt{7}$

7.  $\sqrt{50}$

$5\sqrt{2}$

8.  $\sqrt{80}$

$4\sqrt{5}$

9.  $\sqrt{45}$

$3\sqrt{5}$

10.  $\sqrt{75}$

$5\sqrt{3}$

11.  $\sqrt{72}$

$6\sqrt{2}$

12.  $\sqrt{63}$

$3\sqrt{7}$

13.  $\sqrt{300}$

$10\sqrt{3}$

14.  $\sqrt{125}$

$5\sqrt{5}$

15.  $\sqrt{200}$

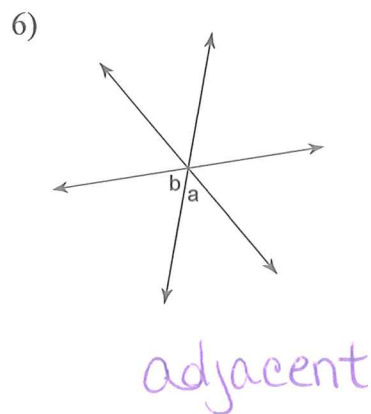
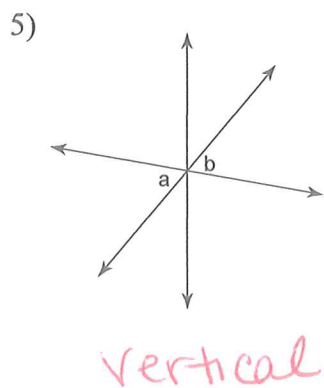
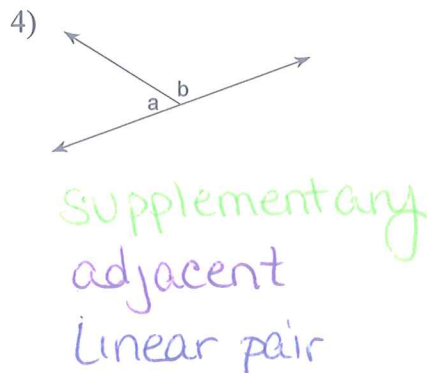
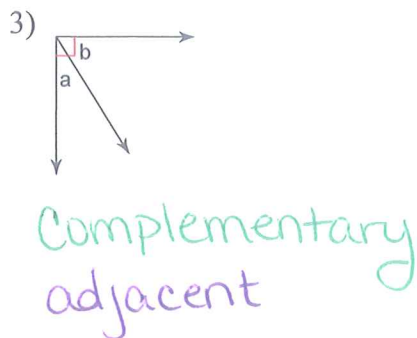
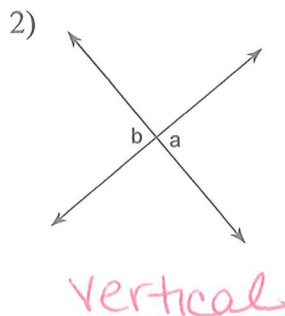
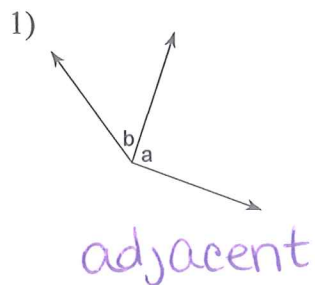
$10\sqrt{2}$

16.  $\sqrt{32}$

$4\sqrt{2}$

### Vocab Practice #1

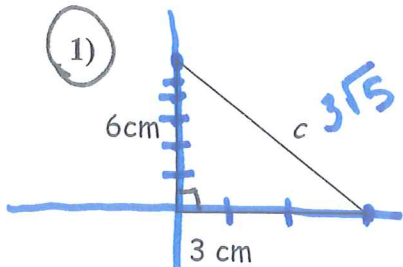
Identify each pair of angles as adjacent, ~~vertical~~, complementary, supplementary, or a linear pair. Include all terms that apply.



# The Pythagorean Theorem Day 1 ~~12/11/2017~~

Name: Key Per: \_\_\_\_\_ Date: \_\_\_\_\_

Find the length of the missing side in the following examples. Leave your answers in exact square roots. Solve these problems without a calculator. Show work please.

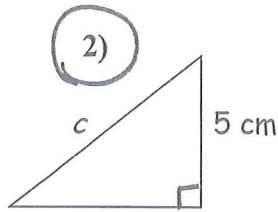


$$6^2 + 3^2 = c^2$$

$$\sqrt{45} = \sqrt{c^2}$$

$$\sqrt{9 \cdot 5} = \sqrt{c^2}$$

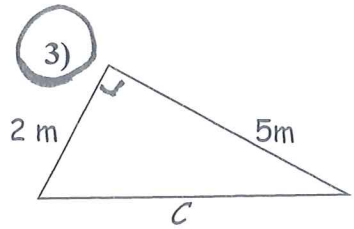
$$C = 3\sqrt{5}$$



$$5^2 + 12^2 = c^2$$

$$C = \sqrt{169}$$

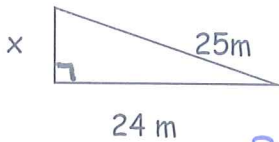
$$C = 13$$



$$2^2 + 5^2 = c^2$$

$$C = \sqrt{29}$$

4)



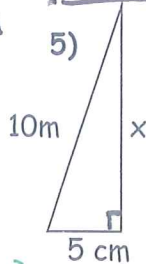
$$x^2 + 24^2 = 25^2$$

$$x^2 + 576 = 625$$

$$\sqrt{x^2} = \sqrt{49}$$

$$x = 7$$

5)



$$x^2 + 5^2 = 10^2$$

$$x^2 + 25 = 100$$

$$\sqrt{x^2} = \sqrt{75}$$

$$x = 5\sqrt{3}$$

$$\sqrt{25 \cdot 3} = \sqrt{75}$$

6)

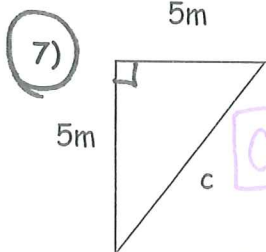
$$x^2 + 8^2 = 20^2$$

$$x^2 + 64 = 400$$

$$x^2 = 336$$

$$\sqrt{x^2} = \sqrt{336}$$

$$x = 4\sqrt{21}$$



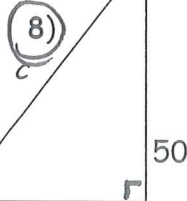
$$C = 5\sqrt{2}$$

$$5^2 + 5^2 = c^2$$

$$25 + 25 = c^2$$

$$\sqrt{50} = \sqrt{c^2}$$

$$\sqrt{25 \cdot 2} = \sqrt{50}$$



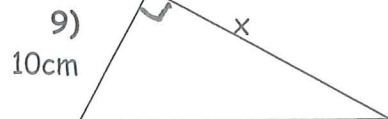
$$50^2 + 40^2 = c^2$$

$$2500 + 1600 = c^2$$

$$\sqrt{4100} = \sqrt{c^2}$$

$$\sqrt{41 \cdot 100} = \sqrt{4100}$$

$$C = 10\sqrt{41}$$



$$x^2 + 10^2 = 11^2$$

$$x^2 + 100 = 121$$

$$x^2 = 21$$

$$x = \sqrt{21}$$