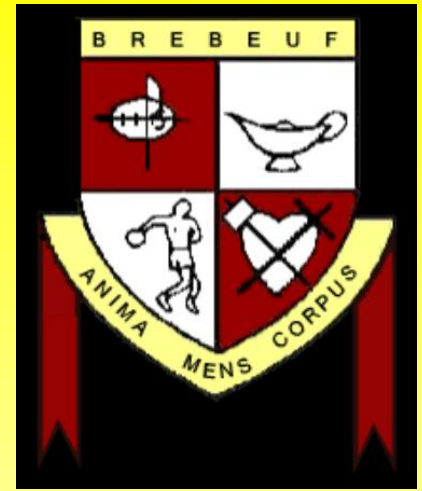


ST. JEAN DE BREBEUF MATHEMATICS



REVIEW

PREREQUISITE

SKILLS

REVIEW

PREREQUISITE SKILLS

SOLVING EQUATIONS / ISOLATING A VARIABLE

Solve for x for each equation:

(1) $x + 3 = 10$

$$x = 10 - 3$$

$$x = 7$$

(2) $-5 + x = 20$

$$x = 20 + 5$$

$$x = 25$$

(3) $4x - 15 = 9$

$$4x = 9 + 15$$

$$\frac{4x}{4} = \frac{24}{4}$$

$$x = 6$$

(4) $-1x + 1 = 17$

$$-1x = 17 - 1$$

$$\frac{-1x}{-1} = \frac{16}{-1}$$

$$x = -16$$

REVIEW

PREREQUISITE SKILLS

SOLVING EQUATIONS / ISOLATING A VARIABLE

Solve for x for each equation:

$$(5) \quad \frac{\cancel{2\pi}x}{\cancel{2\pi}} = \frac{364.24}{2\pi} \quad * \text{ Divide both sides by } 2\pi$$

$$x = 58$$

REVIEW

PREREQUISITE SKILLS

SOLVING EQUATIONS / ISOLATING A VARIABLE

Solve for x for each equation:

$$* (6) \quad \frac{x}{2} = 19$$

$$\cancel{2} \left(\frac{x}{\cancel{2}} \right) = 2(19)$$

$$x = 38$$

$$* (7) \quad \frac{x}{-7} = 4$$

$$\cancel{-7} \left(\frac{x}{\cancel{-7}} \right) = -7(4)$$

$$x = -28$$

$$* (8) \quad \frac{x}{-3} = -5$$

$$\cancel{-3} \left(\frac{x}{\cancel{-3}} \right) = -3(-5)$$

$$x = 15$$

*** To get rid of a fraction, you must **MULTIPLY** both sides by the denominator ***

REVIEW

PREREQUISITE SKILLS

SOLVING EQUATIONS / ISOLATING A VARIABLE

Solve for x for each equation:

(9) $x^2 = 25$

$$\sqrt{x^2} = \sqrt{25}$$

$$x = 5$$

* Take the
square root of
both sides

(10)

$$x^2 - 1 = 8$$

$$x^2 = 8 + 1$$

$$x^2 = 9$$

$$\sqrt{x^2} = \sqrt{9}$$

$$x = 3$$

* (11) $\frac{\cancel{3}x^2}{\cancel{3}} = \frac{48}{3}$

$$x^2 = 16$$

$$\sqrt{x^2} = \sqrt{16}$$

$$x = 4$$

REVIEW

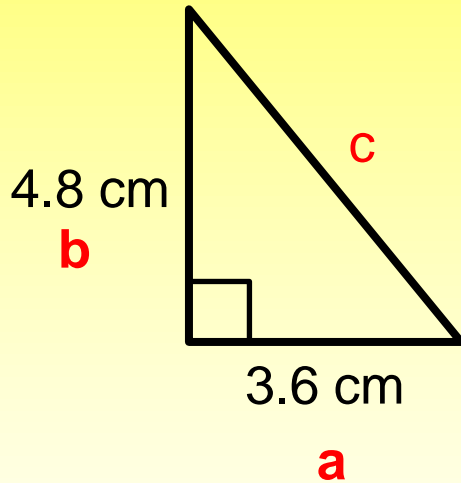
PREREQUISITE SKILLS

PYTHAGOREAN THEOREM

“c” is always the *hypotenuse* (located across the *right angle*)

Using the *Pythagorean Theorem*, $c^2 = a^2 + b^2$, solve for the length of the unknown side

(1)



$$c^2 = a^2 + b^2$$

$$c^2 = (3.6)^2 + (4.8)^2$$

$$c^2 = 12.96 + 23.04$$

$$c^2 = 36$$

$$\sqrt{c^2} = \sqrt{36}$$

$$c = 6$$

1. Write down the formula
2. Label the **hypotenuse**
3. Label the remaining sides, substitute and solve

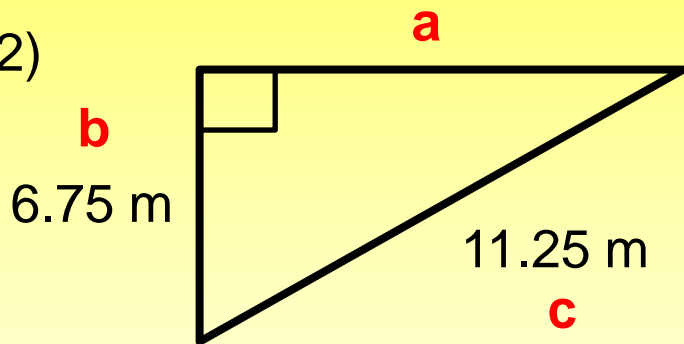
REVIEW

PREREQUISITE SKILLS

PYTHAGOREAN THEOREM

Using the *Pythagorean* Theorem, $c^2 = a^2 + b^2$, solve for the length of the unknown side

(2)



“c” is always the *hypotenuse* (located across the *right* angle)

$$c^2 = a^2 + b^2$$

$$(11.25)^2 = a^2 + (6.75)^2$$

$$126.5625 = a^2 + 45.5625$$

$$126.5625 - 45.5625 = a^2$$

$$81 = a^2$$

$$\sqrt{81} = \sqrt{a^2}$$

$$9 = a$$

1. Write down the formula
2. Label the **hypotenuse**
3. Label the remaining sides, substitute and solve

REVIEW

**PREREQUISITE
SKILLS**

***SEATWORK
/HOMEWORK***

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