

UNIT REVIEW

1. Solve each of the following equations.

a) $-4n = -16$	b) $x - 9 = 17$	c) $\frac{b}{3} = -2$
c) $-2x + 4 = 14$	d) $5x + 3x - 16 - 2x + 20 = 4x + x - 30$	
e) $3(x - 1) - 2(x + 1) = 5x$	f) $(x - 2) - (x + 1) = -5(2x - 1)$	
g) $\frac{3x}{5} - \frac{2x}{3} = 2$	h) $\frac{(x-2)}{6} - \frac{(x-2)}{5} = 2$	

2) You can convert from Fahrenheit to Celsius degrees by using the formula: $F = 2(°C + 15)$.

a) Solve for C

b) What is $81°F$ converted to $°C$?

3) Determine the length of each side of a triangle if the sides are: x , $x + 7$, and $2x - 5$ and the perimeter is 18cm.

[Write your 'let statements', an equation, and show your work.] Consider drawing a diagram.

4) Julie solved two equations. In each she made an error. Identify her error and explain what she did wrong.

a. $3x + 5 = -2$

$$+5 \quad +5$$

$$3x = 3$$

$$\div 3 \quad \div 3$$

$$x = 1$$

(add +5 on both sides)

(divide by 3 on both sides)

b. $x + 4 = +2x - 7$

$$-2x \quad -2x$$

$$-3x + 4 = 7$$

$$-4 \quad -4$$

$$-3x = 3$$

$$\div -3 \quad \div -3$$

$$x = -1$$

(subtract $-2x$ on both sides)

(subtract -4 on both sides)

(divide by -3 on both sides)