

Bellwork Monday, June 2, 2014

Factor each then solve.

1. $40m^2 - 15m = 0$

$$5m(8m-3) = 0$$

$$5m=0 \quad 8m-3=0$$

$$m=0, \frac{3}{8}$$

2. $6p^3 - 294p = 0$

$$6p(p^2 - 49) = 0$$

$$6p(p-7)(p+7) = 0$$

$$p=0, 7, -7$$

3. $h^2 + 8h = 48$

$$h^2 + 8h - 48 = 0$$

$$(h-4)(h+12) = 0$$

$$\begin{array}{cc} -48 & \\ -4 & +12 \\ +8 & \end{array}$$

$$h=4, -12$$

4. $12w^2 - 23w + 10 = 0 \rightarrow (4w-5)(3w-2) = 0$

$$\begin{array}{cc} 120 & \\ -8 & -15 \\ -23 & \end{array}$$

	$4w$	-5
$3w$	$12w^2$	$-15w$
-2	$-8w$	$+10$

$$w = \frac{5}{4}, \frac{2}{3}$$

5. $3c^3 - 9c^2 - 54c = 0$

$$3c(c^2 - 3c - 18)$$

$$3c(c+3)(c-6) = 0$$

$$\begin{array}{cc} +18 & \\ +3 & -6 \\ -3 & \end{array}$$

$$c=0, -3, 6$$