

HW: 2.8/20-23; Chapter 2 Study Guide and Review/71-76

Warm up:

1) Solve for x.

$$2x \left(\frac{4a-5b}{2x} \right) = (y) 2x$$

$$\frac{4a-5b}{2y} = \frac{2xy}{2y}$$

$$\frac{4a-5b}{2y} = x ; y \neq 0$$

2) Solve for n.

$$6n+4b = 2a-cn$$

$$\frac{6n+4b+cn = 2a}{-4b \quad -4b}$$

$$6n+cn = 2a-4b$$

$$\frac{n(6+c) = 2a-4b}{6+c \quad 6+c}$$

$$n = \frac{2a-4b}{6+c} ; c \neq -6$$

$$\frac{6+c \neq 0}{-6 \quad -6}$$

$$c \neq -6$$

HW Solutions

1) $a = -c/13$

2) $g = 5h + f$

3) $k = -7n - m$

4) $p = q/(r + s)$

5) $h = V/[(\pi)r^2]$, 8in

8) $v = (u - z)/w$

9) $c = (-x + b)/d$

10) $g = (10j + 9h)/f$

11) $m = (-n + p)/10$

12) $t = 3/2(r - v)$

13) $v = 9/5(z - w)$

14) $a = (-33 + x)/10c$

15) $f = (6g - 10)/d$

17) $v_f = at + v_i$, 10ft/s²

$$\textcircled{1} \downarrow (a) = \left(\frac{v_f - v_i}{t} \right) \downarrow$$

$$a \downarrow t = v_f - v_i$$

$$\downarrow v_i \quad \quad \downarrow v_i$$

$$\textcircled{a \downarrow t + v_i = v_f}$$

$$2(3) + 4$$

$$6 + 4 = 10$$

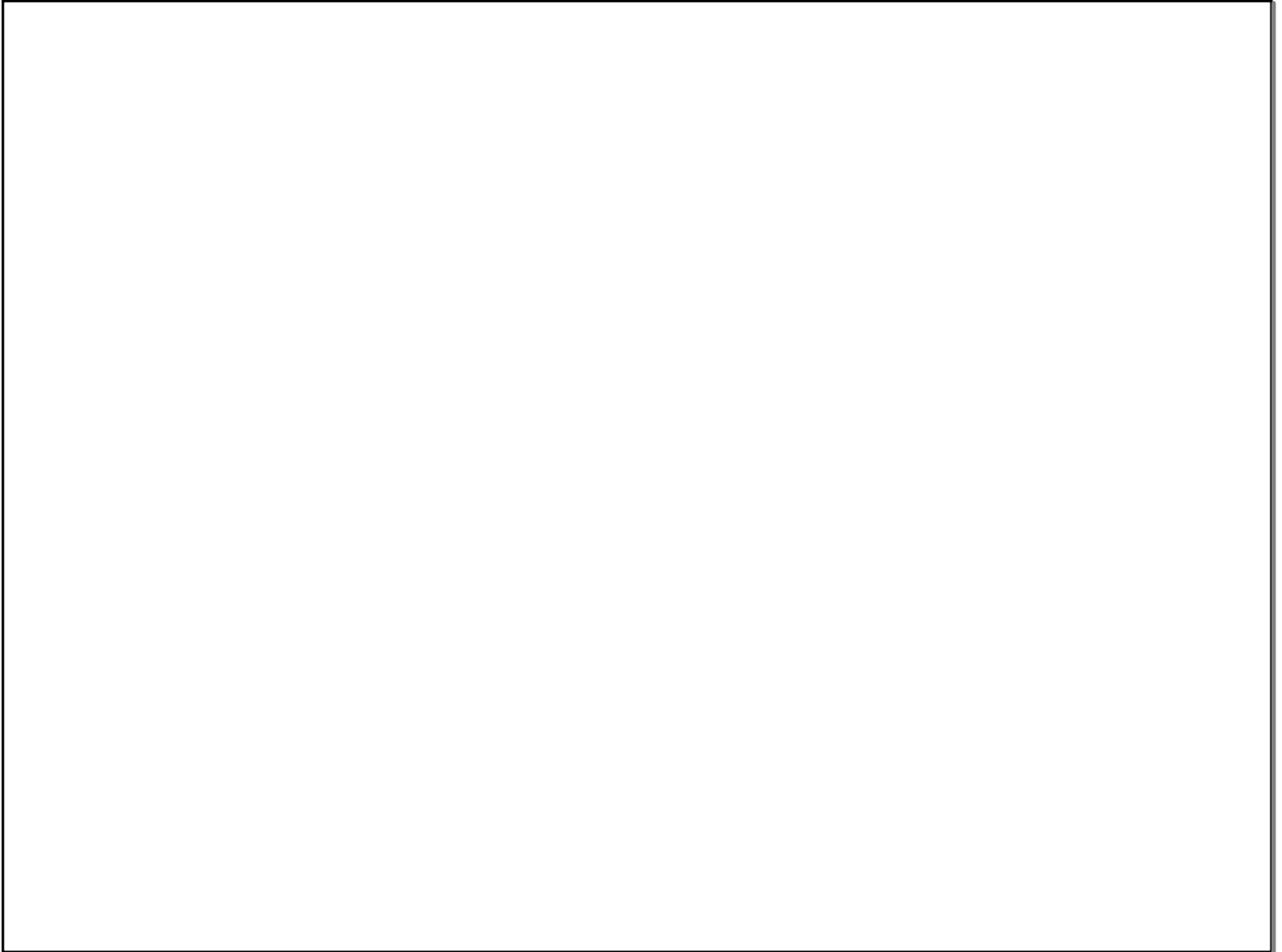
$$\textcircled{10 \text{ ft/s}}$$

$$\textcircled{E} \quad V = \pi r^2 h \leftarrow$$

$$\boxed{\frac{V \leftarrow}{\pi r^2} = h}$$

$$\frac{56.52 \leftarrow}{\pi (1.5)^2} = 7.9959 \dots$$

$\textcircled{8.0 \text{ in}}$



$$\textcircled{4} \quad \frac{q}{r+s} = \frac{p(r+s)}{r+s}$$

$$\frac{q}{r+s} = p$$

$$\textcircled{1} \quad \begin{array}{r} 5a + c = -8a \\ +8a - c \quad +8a - c \end{array}$$

$$\frac{13a}{13} = \frac{-c}{13}$$

$$a = -\frac{c}{13}$$

$$\textcircled{3} \rightarrow \left(\frac{k+m}{-7} \right) = (n) (-7)$$

$$k+m = -7n$$

$$-m \quad -m$$

$$k = -7n - m$$

$$\textcircled{12} \quad r = \frac{2}{3} \downarrow + \downarrow v$$

$$\frac{3}{2}(r - v) = \left(\frac{2}{3} \downarrow\right) \frac{3}{2}$$

$$\frac{3r - 3v}{2} = \downarrow$$

$$\frac{3}{2}r - \frac{3}{2}v$$

$$\textcircled{9} \quad x = \frac{b - cd}{-b - b}$$

$$\frac{x - b}{-d} = \frac{-cd}{-d}$$

$$\frac{x - b}{-d} = c$$

$$\frac{-x + b}{d} = c$$

$$\textcircled{14} \quad \left(\frac{10ac - x}{11} \right) = (-3) \quad ||$$

$$10ac - x = -33$$

$$\quad \quad \quad +x \quad \quad +x$$

$$\frac{10ac}{10c} = \frac{-33+x}{10c}$$

$$a = \frac{-33+x}{10c}$$

Solve for x.

$$\begin{array}{r} \frac{2}{3}x + y = 5a \\ \underline{\phantom{\frac{2}{3}x} - y - y} \\ \frac{2}{3}x = 5a - y \end{array}$$
$$x = \frac{15a - 3y}{2}$$

Solve for x.

$$\begin{array}{r} a+b \neq 0 \\ -b \quad -b \\ \hline a \neq -b \end{array}$$

$$ax + bx = c$$

$$\frac{x(a+b)}{a+b} = \frac{c}{a+b}$$

$$x = \frac{c}{a+b}; a \neq -b$$

Solve for x.

$$x - by = px + c$$

$$\begin{array}{r} +by \quad +by \\ \hline \end{array}$$

$$x = px + by + c$$

$$\begin{array}{r} -px \quad -px \\ \hline \end{array}$$

$$x - px = by + c$$

$$\frac{x(1-p)}{1-p} = \frac{by+c}{1-p}$$

$$\frac{x(1-p)}{1-p} = \frac{by+c}{1-p}$$

$$x = \frac{by+c}{1-p} ; p \neq 1$$

Solve for f.

$$(f+g-d)(F) = \frac{fg}{f+g-d}(f+g-d)$$

$$\begin{array}{r} Ff + Fg - Fd = fg \\ -Ff \quad -Ff \end{array}$$

$$Fg - Fd = fg - Ff$$

$$\frac{Fg - Fd}{g - F} = \frac{f(g - F)}{g - F}$$

$$\frac{Fg - Fd}{g - F} = f ; F \neq g$$

$$\begin{array}{r} g - F \neq 0 \\ \vee F \neq F \\ \hline g \neq F \end{array}$$