

5.5A HW Pg 321 #'s 3-11
Pg 330 #'s 23-27

PARALLEL LINES: #'s 3-11

The instructions do not tell you what form to use, so you could give answers in point-slope. However, on tests you will be asked to give answers in slope INTERCEPT, so I have included those answers.

You DO NOT NEED TO Given standard form.

#'s 3-11

③ $(-1, 3) y = 2x + 2$ $//m = 2$

P/S $y - 3 = 2(x + 1)$

} show work
↓

S/I $y = 2x + 5$

STD FORM: $-2x + y = 5$

⑤ $(5, -1) y = -\frac{3}{5}x - 3$ $//m = -\frac{3}{5}$

P/S $y + 1 = -\frac{3}{5}(x - 5)$

} show work
↓

S/I $y = -\frac{3}{5}x + 2$

STD FORM: $3x + 5y = 10$

④ $y = -\frac{5}{2}x + 10$ pt $(6, 8)$

//line:

//m = $-\frac{5}{2}$ through $(6, 8)$

P/S $y - 8 = -\frac{5}{2}(x - 6)$

↓ $y - 8 = -\frac{5}{2}x + 15$
 $+8$ $+8$

S/I $y = -\frac{5}{2}x + 23$

STD: $5x + 2y = 46$

$$\textcircled{6} \quad y = 5x + 4 \quad (-1, 2)$$

$$\downarrow \\ //m = 5$$

$$\text{P/s } y - 2 = 5(x + 1)$$

$$\downarrow \quad y - 2 = 5x + 5 \\ \quad \quad \quad + 2 \quad \quad \quad + 2$$

$$\text{S/I } \boxed{y = 5x + 7}$$

$$\text{STD: } -5x + y = 7$$

$$\textcircled{7} \quad (1, 7) \quad -6x + y = -1$$

$$\begin{array}{r} +6x \quad \quad +6x \\ \hline y = 6x - 1 \end{array}$$

$$\boxed{//m = 6}$$

$$\text{P/s } y - 7 = 6(x - 1)$$

show work

↓

$$\text{S/I } \boxed{y = 6x + 1}$$

$$\text{STD } -6x + y = 1$$

$$\textcircled{8} \quad (18, 2) \quad \frac{3}{3}y = \frac{x - 12}{3}$$

↓ point
↓ S/I

$$y = \frac{1}{3}x - 4$$

$$\boxed{//m = \frac{1}{3}}$$

$$\text{P/s } y - 2 = \frac{1}{3}(x - 18)$$

$$\downarrow \quad y - 2 = \frac{1}{3}x - 6 \\ \quad \quad \quad + 2 \quad \quad \quad + 2$$

$$\text{S/I } \boxed{y = \frac{1}{3}x - 4}$$

$$\text{STD: } -x + 3y = -12$$

$$\textcircled{9} \quad (-2, 5) \quad \frac{2y}{2} = \frac{4x - 6}{2}$$

$$y = 2x - 3$$

$$\boxed{//m = 2}$$

$$\text{P/s } y - 5 = 2(x + 2)$$

show work

$$\downarrow \quad \text{S/I } \boxed{y = 2x + 9}$$

$$\text{STD: } -2x + y = 9$$

⑩ (9, 4) $y - x = 3$
 $\begin{array}{r} \downarrow \text{put in} \\ \text{s/I} \end{array}$
 $\frac{y - x}{+x \quad +x} = \frac{3}{+x \quad +x}$
 $y = x + 3$
//m=1

p/s $y - 4 = 1(x - 9)$

$\frac{y - 4}{+4} = \frac{x - 9}{+9}$

s/I $y = x - 5$

STD: $-x + y = -5$

⑪ (-10, 0) $-y + 3x = 16$
 $\frac{-y + 3x}{-3x \quad -3x} = \frac{16}{-3x \quad -3x}$
 $\frac{-y}{-1} = \frac{-3x + 16}{-1}$
 $y = 3x - 16$
//m=3

p/s $y - 0 = 3(x + 10)$

Show work

s/I $y = 3x + 30$

STD: $-3x + y = 30$

PG 330 #'s 23-27

⑳ $g(x) = -10x$

$g(-2) = -10(-2) = 20$

$g(5) = -10(5) = -50$

$g(0) = -10(0) = 0$

㉑ $V(x) = 14 - 5x$

$V(-2) = 14 - 5(-2) = 24$

$V(5) = 14 - 5(5) = -11$

$V(0) = 14$

㉒ $m = \frac{\text{Rise}}{\text{Run}} = \frac{4}{4} \quad \underline{\underline{m=1}}$

$b=4$

s/I $y = x + 4$

OR You could give:

p/s $y - 0 = 1(x + 4)$ OR

p/s $y - 4 = 1(x - 0)$

㉓ $m = \frac{3}{-4} \quad \underline{\underline{m = -\frac{3}{4}}}$
 $b = -1$

s/I $y = -\frac{3}{4}x - 1$

OR p/s:

$y + 1 = -\frac{3}{4}(x - 0)$

$y + 3 = -\frac{3}{4}(x - 4)$

㉔ You are not Given y-int!

$m = \frac{4}{4} \quad \underline{\underline{m=1}}$

p/s $y - 2 = 1(x - 3)$

$\downarrow \frac{y - 2}{+2} = \frac{x - 3}{+2}$

s/I $y = x - 1$

p/s $y + 2 = 1(x + 1)$

$\downarrow \frac{y + 2}{-2} = \frac{x + 1}{-2}$
s/I $y = x - 1$