

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 $(-1, 3) \ y = 2x + 2 \quad //m = 2$

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

} show work
↓

S/I $y = 2x + 5$

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

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

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

//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: $5x + 2y = 46$

⑥ $y = 5x + 4$ $(-1, 2)$

$\downarrow$
// $m = 5$

P/s $y - 2 = 5(x + 1)$

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

S/I $y = 5x + 7$

STD: $-5x + y = 7$

⑧ $(18, 2)$ $3y = x - 12$

$\downarrow$ put in
 $\downarrow$ S/I

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

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

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

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

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

STD: $-x + 3y = -12$

⑦ $(1, 7)$ $-6x + y = -1$

$+6x \quad +6x$
 $y = 6x - 1$

// $m = 6$

P/s $y - 7 = 6(x - 1)$

show work



S/I $y = 6x + 1$

STD: $-6x + y = 1$

⑨ $(-2, 5)$ $2y = 4x - 6$

$\frac{2}{2} \quad \frac{4}{2} \quad \frac{-6}{2}$

$y = 2x - 3$

// $m = 2$

P/s $y - 5 = 2(x + 2)$

show work



S/I $y = 2x + 9$

STD: $-2x + y = 9$

⑩ (9, 4) $y - x = 3$
 $\downarrow$ put in
 $\downarrow$ S/I

$$\begin{array}{r} y - x = 3 \\ +x \quad +x \\ \hline y = x + 3 \\ \text{// } m = 1 \end{array}$$

pls $y - 4 = 1(x - 9)$

$$\begin{array}{r} y - 4 = x - 9 \\ +4 \quad +4 \\ \hline y = x - 5 \end{array}$$

S/I
$$\boxed{y = x - 5}$$

STD: $-x + y = -5$

⑪ (-10, 0) $-y + 3x = 16$
 $\downarrow$ put in
 $\downarrow$ S/I

$$\begin{array}{r} -y + 3x = 16 \\ -3x \quad -3x \\ \hline -y = -3x + 16 \\ \text{// } m = 3 \end{array}$$

P/S $y - 0 = 3(x + 10)$

show work

$\downarrow$
 S/I
$$\boxed{y = 3x + 30}$$

STD: $-3x + y = 30$

PG 330 #'s 23-27

②③ $g(x) = -10x$
 $g(-2) = -10(-2) = 20$
 $g(5) = -10(5) = -50$
 $g(0) = -10(0) = 0$

②④ $V(x) = 14 - 5x$
 $V(-2) = 14 - 5(-2) = 24$
 $V(5) = 14 - 5(5) = -11$
 $V(0) = 14$

②⑤ $m = \frac{\text{Rise}}{\text{Run}} = \frac{4}{4} \quad \underline{\underline{m = 1}}$
 $b = 4$
 S/I $y = x + 4$
 OR You could give:
 P/S $y - 0 = 1(x + 4)$ OR
 P/S $y - 4 = 1(x - 0)$

②⑥ $m = \frac{3}{-4} \quad \underline{\underline{m = -\frac{3}{4}}}$
 $b = -1$
 S/I $y = -\frac{3}{4}x - 1$
 OR P/S:
 $y + 1 = -\frac{3}{4}(x - 0)$
 $y + 3 = -\frac{3}{4}(x - 4)$

②⑦ You are not Given Y-INT!

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

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

$\downarrow$ $y - 2 = x - 3$
 $+2 \quad +2$
 S/I
$$\boxed{y = x - 1}$$

P/S $y + 2 = 1(x + 1)$
 $\downarrow$ $y + 2 = x + 1$
 $-2 \quad -2$
 S/I
$$\boxed{y = x - 1}$$