

7B

4, and 7B.1 and 7B.2, look in Appendix A
i.

1) 4

2) 3

3) slope

4) negative; $m = \frac{2}{-8} = -\frac{1}{4}$

5) positive; $m = \frac{3}{5}$

6) positive; $m = \frac{4}{6} = \frac{2}{3}$

7) negative; $m = \frac{1}{-2} = -\frac{1}{2}$

8) negative; $m = \frac{2}{-6} = -\frac{1}{3}$

9) positive; $m = \frac{6}{8} = \frac{3}{4}$

7C

1) -3

2) down

3) $m = \frac{6}{4} = \frac{3}{2}$; $b = -2$

4) $Y = \frac{3}{2}X - 2$

5) $m = \frac{1}{-3} = -\frac{1}{3}$; $b = 1$

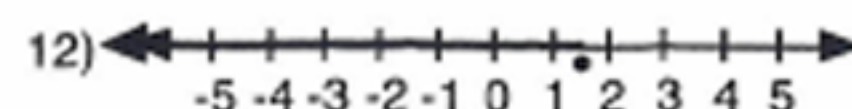
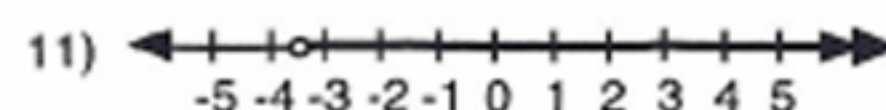
6) $Y = -\frac{1}{3}X + 1$

7) $m = \frac{3}{4}$; $b = 0$

8) $Y = \frac{3}{4}X$

9) $m = \frac{2}{4} = \frac{1}{2}$; $b = -1$

10) $Y = \frac{1}{2}X - 1$



13) $[(7 - 3) \times 4^2 - 9] \div 3^3 =$
 $[4 \times 16 - 9] \div 27 =$
 $(64 - 9) \div 27 =$
 $55 \div 27 = 2 \frac{1}{27}$

14) $| -4 - 2 | + 8^2 - 7 \times 5 + 19 =$
 $| -6 | + 16 - 35 + 19 =$
 $6 + 16 - 35 + 19 = 6$

15) $13^2 + 5 \div 10 =$
 $169 + (5 \div 10) =$
 $169 + (.5) = 169.5 \text{ or } 169 \frac{1}{2}$

16) $5(9 - 2) - 6(7) + 2^3 \cdot 3 =$
 $5(7) - 6(7) + (8 \cdot 3) =$
 $35 - 42 + 24 = 17$

17) $2X - 5 = -X + 13$
 $2X + X = 13 + 5$
 $3X = 18 \quad X = 6$

18) $Y + 14 - 3Y = 0$
 $Y - 3Y = -14$
 $-2Y = -14 \quad Y = 7$

19) $-3 \frac{1}{2}B + \frac{2}{3} = 5 \frac{1}{4} + \frac{5}{6}B$
 $12[-\frac{7}{2}B + \frac{2}{3}] = 12[\frac{21}{4} + \frac{5}{6}B]$
 $-42B + 8 = 63 + 10B$
 $8 - 63 = 10B + 42B$
 $-55 = 52B \quad B = -1 \frac{3}{52}$

20) $2.7T + 1.09 = 5.3 - .6T$
 $100[2.7T + 1.09] = 100[5.3 - .6T]$
 $270T + 109 = 530 - 60T$
 $270T + 60T = 530 - 109$
 $330T = 421 \quad T = 330/421 \text{ or } 1 \frac{91}{330}$