

1. $y = 3x + 2$: state the slope and y-intercept.

m is on x; b stands alone

Answer: $m = 3$, $b = 2$

2. $y = -2x + 7$: slope and y-intercept?

Read m and b

Answer: $m = -2$, $b = 7$

3. A gym costs \$20 to join plus \$10/month. Write the equation.

Start 20, rate 10

Answer: $y = 10x + 20$

4. $y = 5x + 3$. Find y when $x = 4$.

$5(4) + 3$

Answer: 23

5. Table: $x = 0, 1, 2$ with $y = 7, 9, 11$. Slope and y-intercept?

Rate: +2 each step; start: 7

Answer: $m = 2$, $b = 7$

6. $y = -x + 6$. Find x when $y = 0$.

$0 = -x + 6$

Answer: $x = 6$

7. Which starts higher: $y = 3x + 8$ or $y = 5x + 2$?

Compare b values

Answer: $y = 3x + 8$ (starts at 8)

8. A candle is 12 in tall and burns 1.5 in per hour. Equation and height after 4 hr?

$y = -1.5x + 12$

$-6 + 12$

Answer: $y = -1.5x + 12$; 6 in

9. Table: $x = 2$, $y = 11$ and $x = 5$, $y = 20$. Find m and b. ★ challenge

$m = (20-11)/(5-2) = 3$

$11 = 3(2) + b$, so $b = 5$

Answer: $y = 3x + 5$

10. Phone plan: \$45 flat + \$0.08 per text over the limit. Cost with 150 extra texts? Which part is m, which is

$b = 45$ (flat), $m = 0.08$

$45 + 0.08(150) = 45 + 12$

Answer: \$57; $m = 0.08$, $b = 45$