Version A

1. m is the input, Q is the output. We are looking for Q when the input $m = 5$. According to the table, $Q = 4$ when $m = 5$, hence $p(5) = 4$.

2. (a) Substitute $x = -3$ into $f(x)$:

$$f(-3) = 2(-3)^2 - 5(-3) = 2(9) + 15 = 18 + 15 = 33$$

   (b) Substitute in $g(x) = 17$ and solve for x:

$$\begin{aligned} 2x + 11 &= 17 \\ 2x &= 6 \\ x &= 3 \end{aligned}$$

3. We need to find what inputs t give outputs $g(t) = -1$, i.e. we need to find what numbers t have vertical coordinate equal to -1. There are two values $t = -1$ and $t = 3$ since the graph passes through the points $(-1, -1)$ and $(3, -1)$.

4. Here $n = 8, G = 3$. We can interpret this as 8 cats drink 3 gallons of milk in a day.

5. Answers will vary.

Version B

1. m is the input, Q is the output. We are looking for Q when the input $m = 8$. According to the table, $Q = 3$ when $m = 8$, hence $p(8) = 3$.

2. (a) Substitute $x = -3$ into $f(x)$:

$$f(-3) = 3(-3)^2 - 5(-3) = 3(9) + 15 = 27 + 15 = 42$$

   (b) Substitute in $g(x) = 19$ and solve for x:

$$\begin{aligned} 2x + 11 &= 19 \\ 2x &= 8 \\ x &= 4 \end{aligned}$$

3. We need to find what inputs t give outputs $g(t) = 2$, i.e. we need to find what numbers t have vertical coordinate equal to 2. There are two values $t = -2$ and $t = 1$ since the graph passes through the points $(-2, 2)$ and $(1, 2)$.

4. Here $n = 7, G = 3$. We can interpret this as 7 cats drink 3 gallons of milk in a day.

5. Answers will vary.

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