**Task card 1** Piecewise Functions: Choosing the...

# Find f(-2).

$$f(x) = \begin{cases} -3x - 6 & \text{if } x < 2 \\ 3x + 1 & \text{if } x \geq 2 \end{cases}$$

**Task card 2** Piecewise Functions: Choosing the...

# Find f(-2).

$$f(x) = \begin{cases} -x & \text{if } x < -2 \\ 5x & \text{if } x \geq -2 \end{cases}$$

**Task card 3** Piecewise Functions: Choosing the...

# Find f(7).

$$f(x) = \begin{cases} 2x & \text{if } x < -1 \\ x + 5 & \text{if } -1 \leq x \leq 3 \\ -x + 6 & \text{if } x > 3 \end{cases}$$

**Task card 4** Piecewise Functions: Choosing the...

Which piece of f do you use to find f(-5)?

$$f(x) = \begin{cases} -4x + 2 & \text{if } x < -3 \\ -2x + 6 & \text{if } -3 \leq x \leq 2 \\ 5x - 4 & \text{if } x > 2 \end{cases}$$

**Task card 5** Piecewise Functions: Choosing the...

# Find f(-3).

$$f(x) = \begin{cases} 7 & \text{if } x \leq -1 \\ -2x - 8 & \text{if } x > -1 \end{cases}$$

**Task card 6** Piecewise Functions: Choosing the...

# Find f(-5).

$$f(x) = \begin{cases} x + 8 & \text{if } x \leq 0 \\ -4x - 4 & \text{if } x > 0 \end{cases}$$

**Task card 7** Piecewise Functions: Choosing the...

# Find f(8).

$$f(x) = \begin{cases} 5x - 7 & \text{if } x < -2 \\ -8 & \text{if } -2 \le x \le 3 \\ 5x + 2 & \text{if } x > 3 \end{cases}$$

**Task card 8** Piecewise Functions: Choosing the...

A parking garage charges $4 for up to 4 hours, plus $5 for each hour over 4. The cost is C(h). How many dollars does 6 hours cost?

$$C(h) = \begin{cases} 4 & \text{if } 0 < h \le 4 \\ 4 + 5(h - 4) & \text{if } h > 4 \end{cases}$$

**Task card 9** Piecewise Functions: Choosing the...

# Find f(4).

$$f(x) = \begin{cases} 3x + 8 & \text{if } x \le 0 \\ -3x - 5 & \text{if } x > 0 \end{cases}$$

**Task card 10** Piecewise Functions: Choosing the...

# Find f(2).

$$f(x) = \begin{cases} 5x + 4 & \text{if } x \le 2 \\ 3x + 3 & \text{if } x > 2 \end{cases}$$

**Task card 11** Piecewise Functions: Choosing the...

# Find f(-6).

$$f(x) = \begin{cases} -2x - 6 & \text{if } x < -2 \\ -x - 4 & \text{if } -2 \le x \le 1 \\ -4x - 3 & \text{if } x > 1 \end{cases}$$

**Task card 12** Piecewise Functions: Choosing the...

Which piece of f do you use to find f(5)?

$$f(x) = \begin{cases} -3x + 8 & \text{if } x < -4 \\ -2x - 1 & \text{if } -4 \le x \le 0 \\ -x - 4 & \text{if } x > 0 \end{cases}$$

**Task card 13** Piecewise Functions: Choosing the...

# Find f(0).

$$f(x) = \begin{cases} -5x + 5 & \text{if } x \le -3 \\ 2 & \text{if } x > -3 \end{cases}$$

**Task card 14** Piecewise Functions: Choosing the...

# Find f(-6).

$$f(x) = \begin{cases} 3x + 4 & \text{if } x \le -2 \\ 4x + 6 & \text{if } x > -2 \end{cases}$$

**Task card 15** Piecewise Functions: Choosing the...

# Find f(-2).

$$f(x) = \begin{cases} -x + 6 & \text{if } x < -5 \\ 4x - 8 & \text{if } -5 \le x \le -1 \\ -5x - 8 & \text{if } x > -1 \end{cases}$$

**Task card 16** Piecewise Functions: Choosing the...

A parking garage charges $9 for up to 6 hours, plus $2 for each hour over 6. The cost is C(h). How many dollars does 3 hours cost?

$$C(h) = \begin{cases} 9 & \text{if } 0 < h \le 6 \\ 9 + 2(h - 6) & \text{if } h > 6 \end{cases}$$

**Task card 17** Piecewise Functions: Choosing the...

# Find f(0).

$$f(x) = \begin{cases} -x + 5 & \text{if } x < -1 \\ 4x - 4 & \text{if } -1 \le x \le 3 \\ 5x + 7 & \text{if } x > 3 \end{cases}$$

**Task card 18** Piecewise Functions: Choosing the...

# Find f(0).

$$f(x) = \begin{cases} -4x - 2 & \text{if } x \le 0 \\ 4x + 7 & \text{if } x > 0 \end{cases}$$

**Task card 19** Piecewise Functions: Choosing the...

# Find f(2).

$$f(x) = \begin{cases} 2x^2 + 2 & \text{if } x < 3 \\ -2x + 4 & \text{if } x \geq 3 \end{cases}$$

**Task card 20** Piecewise Functions: Choosing the...

# Find f(1) + f(-4).

$$f(x) = \begin{cases} -4x + 3 & \text{if } x < 0 \\ 4x - 8 & \text{if } x \geq 0 \end{cases}$$

**Task card 21** Piecewise Functions: Choosing the...

## Find the x-value where f(x) = 1.

$$f(x) = \begin{cases} 3 & \text{if } x \leq -1 \\ -x + 1 & \text{if } x > -1 \end{cases}$$

**Task card 22** Piecewise Functions: Choosing the...

A parking garage charges $5 for up to 4 hours, plus $3 for each hour over 4. The cost is C(h). How many dollars does 2 hours cost?

$$C(h) = \begin{cases} 5 & \text{if } 0 < h \leq 4 \\ 5 + 3(h - 4) & \text{if } h > 4 \end{cases}$$

**Task card 23** Piecewise Functions: Choosing the...

# Find f(1).

$$f(x) = \begin{cases} 2x - 7 & \text{if } x < 0 \\ 5x + 2 & \text{if } 0 \leq x \leq 3 \\ -4x - 4 & \text{if } x > 3 \end{cases}$$

**Task card 24** Piecewise Functions: Choosing the...

## Which piece of f do you use to find f(0)?

$$f(x) = \begin{cases} 3x + 6 & \text{if } x < -1 \\ -5x - 8 & \text{if } -1 \leq x \leq 2 \\ 4x - 7 & \text{if } x > 2 \end{cases}$$

# Piecewise Functions: Choosing the Right Piece Task Cards

Recording sheet · Grade 9 · Each function is shown with a brace; its pieces are numbered from the top, 1, 2, 3. When a question asks which piece to use, answer with that number. Otherwise write the value as a number.

Scan to check your answers

Name: _____ Date: _____

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 |

# Piecewise Functions: Choosing the Right Piece Task Cards: Answer Key

Grade 9 · Medium

The answers online

| | | |
|---|---|---|
| **1.** 0 | **2.** -10 | **3.** -1 |
| **4.** 1 | **5.** 7 | **6.** 3 |
| **7.** 42 | **8.** 14 | **9.** -17 |
| **10.** 14 | **11.** 6 | **12.** 3 |
| **13.** 2 | **14.** -14 | **15.** -16 |
| **16.** 9 | **17.** -4 | **18.** -2 |
| **19.** 10 | **20.** 15 | **21.** 0 |
| **22.** 5 | **23.** 7 | **24.** 2 |