

**Composition of Functions - Matching Worksheet**

Write the letter of the answer that matches the problem.

- \_\_\_\_\_ 1. The two functions  $t(x)$  and  $v(x)$  are defined below.
- a.  $f(m-7) = 9m-63$ .

$$t(x) = 9x - 3$$

$$v(x) = x^2 + 3$$

Evaluate the composition of functions  $v(t(5))$

- \_\_\_\_\_ 2. The two functions  $t(x)$  and  $v(x)$  are defined below.
- b.  $t(5) = 42$  and  $v(42) = 1767$ .

$$t(x) = 4x - 2$$

$$v(x) = x^2 + 2$$

Evaluate the composition of functions  $v(t(6))$

- \_\_\_\_\_ 3. Use the following function rule to find  $f(m - 7)$ . Simplify your answer.
- c.  $f(m-8) = 4m-32$ .

$$f(c) = 9c$$

- \_\_\_\_\_ 4. The two functions  $t(x)$  and  $v(x)$  are defined below.
- d.  $f(m - 9) = 1m - 9$ .

$$t(x) = 5x - 3$$

$$v(x) = x^2 + 3$$

Evaluate the composition of functions  $v(t(8))$

- \_\_\_\_\_ 5. Use the following function rule to find  $f(m - 8)$ . Simplify your answer.
- e.  $t(8) = 37$  and  $v(37) = 1372$ .

$$f(c) = 4c$$

- \_\_\_\_\_ 6. Use the following function rule to find  $f(m - 9)$ . Simplify your answer.
- f.  $t(6) = 22$  and  $v(22) = 486$ .

$$f(c) = 1c$$

