

## Find the Range

| Name |  |
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|      |  |

Score \_\_\_\_\_

DR:14

Find the range of each function by completing the table.

| Q. No | Functions                  | Domain                    | Range |
|-------|----------------------------|---------------------------|-------|
| 1)    | $f(x) = \sqrt{2x} - 8$     | {-8, 0, 2, 18}            |       |
| 2)    | f(x) = 5 - 3x              | {-7, -5, -4, -2, -1, 3}   |       |
| 3)    | $f(x) = \frac{x}{2}$       | {2, 4, 8, 12, 14, 18, 20} |       |
| 4)    | $f(x) = x^3 - x^2 - x + 4$ | {-2, -1, 0, 2, 4}         |       |
| 5)    | $f(x) = \frac{2x + 3}{3}$  | {-18, -12, -9, -6}        |       |
| 6)    | f(x) = -7x                 | {-4, -3, -1, 2, 5, 7}     |       |
| 7)    | f(x) = x + 4               | {–10, –5, 5, 6, 8, 9, 11} |       |
| 8)    | $f(x) = -3x^2 + 1$         | {-5, -4, -2, -1, 3}       |       |



## Find the Range

## **Answer key**

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|------|--|
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Score \_\_\_\_\_

DR:14

Find the range of each function by completing the table.

| Q. No | Functions                  | Domain                    | Range                       |
|-------|----------------------------|---------------------------|-----------------------------|
| 1)    | $f(x) = \sqrt{2x} - 8$     | {-8, 0, 2, 18}            | {-4, -8, -6, -2}            |
| 2)    | f(x) = 5 - 3x              | {-7, -5, -4, -2, -1, 3}   | {-4, 8, 11, 17, 20, 26}     |
| 3)    | $f(x) = \frac{x}{2}$       | {2, 4, 8, 12, 14, 18, 20} | {1, 2, 4, 6, 7, 9, 10}      |
| 4)    | $f(x) = x^3 - x^2 - x + 4$ | {-2, -1, 0, 2, 4}         | {-6, 3, 4, 6, 48}           |
| 5)    | $f(x) = \frac{2x + 3}{3}$  | {-18, -12, -9, -6}        | {-11, -7, -5, -3}           |
| 6)    | f(x) = -7x                 | {-4, -3, -1, 2, 5, 7}     | {-49, -35, -14, 7, 21, 28}  |
| 7)    | f(x) = x + 4               | {-10, -5, 5, 6, 8, 9, 11} | {-6, -1, 9, 10, 12, 13, 15} |
| 8)    | $f(x) = -3x^2 + 1$         | {-5, -4, -2, -1, 3}       | {-74, -47, -26, -11, -2}    |