

## 9.4

Date \_\_\_\_\_ Period \_\_\_\_\_

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**State the possible rational zeros for each function.**

1)  $f(x) = 5x^2 - 4x - 1$

2)  $f(x) = 3x^2 + 11x + 6$

3)  $f(x) = 2x^2 - x - 1$

4)  $f(x) = 3x^3 - 15x^2 + 26x - 16$

5)  $f(x) = 3x^3 - 25x^2 + 52x - 10$

6)  $f(x) = x^2 + 10x - 8$

7)  $f(x) = 5x^2 + 4x - 1$

8)  $f(x) = 4x^3 + 9x^2 + 6x + 1$

9)  $f(x) = 3x^3 + 35x^2 + 28x + 4$

10)  $f(x) = 2x^3 - 3x^2 + 1$

## Answers to 9.4 (ID: 1)

$$1) \pm 1, \pm \frac{1}{5}$$

$$2) \pm 1, \pm 2, \pm 3, \pm 6, \pm \frac{1}{3}, \pm \frac{2}{3}$$

$$3) \pm 1, \pm \frac{1}{2}$$

$$4) \pm 1, \pm 2, \pm 4, \pm 8, \pm 16, \pm \frac{1}{3}, \pm \frac{2}{3}, \pm \frac{4}{3}, \pm \frac{8}{3}, \pm \frac{16}{3}$$

$$5) \pm 1, \pm 2, \pm 5, \pm 10, \pm \frac{1}{3}, \pm \frac{2}{3}, \pm \frac{5}{3}, \pm \frac{10}{3}$$

$$6) \pm 1, \pm 2, \pm 4, \pm 8$$

$$7) \pm 1, \pm \frac{1}{5}$$

$$8) \pm 1, \pm \frac{1}{2}, \pm \frac{1}{4}$$

$$9) \pm 1, \pm 2, \pm 4, \pm \frac{1}{3}, \pm \frac{2}{3}, \pm \frac{4}{3}$$

$$10) \pm 1, \pm \frac{1}{2}$$