

Valutazione di polinomi di primo grado in una variabile

Periodo 1 - UdA 3-4

Valutare i seguenti polinomi per i valori indicati

- | | | | | |
|-----|--------------------------------------|-----------------------------|------------------------------|------------------------------|
| 1. | $P(x) = 3x + 3$ | $P(2)$ | $P(3)$ | $P(1)$ |
| 2. | $Q(x) = -2x - 2$ | $Q(-2)$ | $Q(-3)$ | $Q(4)$ |
| 3. | $P(x) = -3x + 3$ | $P(-3)$ | $P(3)$ | $P(-2)$ |
| 4. | $Q(x) = 2x - 1$ | $Q(-5)$ | $Q(-3)$ | $Q(2)$ |
| 5. | $P(x) = -x + 2$ | $P(-4)$ | $P(2)$ | $P(0)$ |
| 6. | $Q(x) = x - 5$ | $Q(-2)$ | $Q(3)$ | $Q(2)$ |
| 7. | $P(x) = \frac{2}{3}x - \frac{1}{4}$ | $P\left(\frac{3}{2}\right)$ | $P\left(-\frac{1}{4}\right)$ | $P(0)$ |
| 8. | $Q(x) = -\frac{1}{2}x - 2$ | $Q\left(\frac{3}{2}\right)$ | $Q\left(-\frac{1}{2}\right)$ | $Q(2)$ |
| 9. | $P(x) = -2x - \frac{3}{2}$ | $P\left(\frac{1}{4}\right)$ | $P(-1)$ | $P\left(-\frac{3}{2}\right)$ |
| 10. | $Q(x) = -\frac{1}{3}x + \frac{1}{3}$ | $Q(-1)$ | $Q\left(-\frac{3}{2}\right)$ | $Q\left(-\frac{1}{2}\right)$ |

11.	$P(x) = \frac{3}{4}x + \frac{1}{2}$	$P(2)$	$P\left(-\frac{4}{3}\right)$	$P\left(-\frac{2}{3}\right)$
12.	$Q(x) = \frac{1}{4}x + \frac{2}{3}$	$Q\left(\frac{4}{3}\right)$	$Q\left(-\frac{2}{3}\right)$	$Q(-2)$
13.	$P(x) = \frac{3}{5}x$	$P(1)$	$P\left(-\frac{2}{3}\right)$	$P\left(\frac{5}{6}\right)$
14.	$Q(x) = -\frac{4}{3}x + 2$	$Q\left(\frac{3}{4}\right)$	$Q\left(-\frac{3}{2}\right)$	$Q\left(\frac{5}{6}\right)$
15.	$P(x) = \frac{1}{6}x + \frac{2}{3}$	$P(-1)$	$P(-2)$	$P\left(-\frac{2}{3}\right)$
16.	$Q(x) = \frac{5}{6}x - 1$	$Q(3)$	$Q\left(\frac{2}{5}\right)$	$Q\left(-\frac{3}{10}\right)$
17.	$P(x) = -4x - \frac{1}{2}$	$P\left(\frac{1}{2}\right)$	$P\left(-\frac{1}{2}\right)$	$P\left(-\frac{3}{4}\right)$
18.	$Q(x) = -\frac{5}{3}x + \frac{2}{3}$	$Q(-1)$	$Q(2)$	$Q\left(-\frac{4}{5}\right)$
19.	$P(x) = -\frac{7}{4}x + \frac{1}{2}$	$P\left(\frac{1}{2}\right)$	$P(2)$	$P\left(-\frac{5}{7}\right)$
20.	$Q(x) = -\frac{2}{7}x + \frac{1}{2}$	$Q\left(\frac{1}{2}\right)$	$Q\left(-\frac{1}{2}\right)$	$Q\left(\frac{7}{4}\right)$

SOLUZIONI

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$$[1] \quad P(2) = 9 \quad P(3) = 12 \quad P(1) = 6$$

$$[3] \quad P(-3) = 12 \quad P(3) = -6 \quad P(-2) = 9$$

$$[5] \quad P(-4) = 6 \quad P(2) = 0 \quad P(0) = 2$$

$$[7] \quad P\left(\frac{3}{2}\right) = \frac{3}{4} \quad P\left(-\frac{1}{4}\right) = -\frac{5}{12} \quad P(0) = -\frac{1}{4}$$

$$[9] \quad P\left(\frac{1}{4}\right) = -2 \quad P(-1) = \frac{1}{2} \quad P\left(-\frac{3}{2}\right) = \frac{3}{2}$$

$$[11] \quad P(2) = 2 \quad P\left(-\frac{4}{3}\right) = -\frac{1}{2} \quad P\left(-\frac{2}{3}\right) = 0$$

$$[13] \quad P(1) = \frac{3}{5} \quad P\left(-\frac{2}{3}\right) = -\frac{2}{5} \quad P\left(\frac{5}{6}\right) = \frac{1}{2}$$

$$[15] \quad P(-1) = \frac{1}{2} \quad P(-2) = \frac{1}{3} \quad P\left(-\frac{2}{3}\right) = \frac{5}{9}$$

$$[17] \quad P\left(\frac{1}{2}\right) = -\frac{5}{2} \quad P\left(-\frac{1}{2}\right) = \frac{3}{2} \quad P\left(-\frac{3}{4}\right) = \frac{5}{2}$$

$$[19] \quad P\left(\frac{1}{2}\right) = -\frac{3}{8} \quad P(2) = -3 \quad P\left(-\frac{5}{7}\right) = \frac{7}{4}$$

$$[2] \quad Q(-2) = 2 \quad Q(-3) = 4 \quad Q(4) = -10$$

$$[4] \quad Q(-5) = -11 \quad Q(-3) = -7 \quad Q(2) = 3$$

$$[6] \quad Q(-2) = -7 \quad Q(3) = -2 \quad Q(2) = -3$$

$$[8] \quad Q\left(\frac{3}{2}\right) = -\frac{11}{4} \quad Q\left(-\frac{1}{2}\right) = -\frac{7}{4} \quad Q(2) = -3$$

$$[10] \quad Q(-1) = \frac{2}{3} \quad Q\left(-\frac{3}{2}\right) = \frac{5}{6} \quad Q\left(-\frac{1}{2}\right) = \frac{1}{2}$$

$$[12] \quad Q\left(\frac{4}{3}\right) = 1 \quad Q\left(-\frac{2}{3}\right) = \frac{1}{2} \quad Q(-2) = \frac{1}{6}$$

$$[14] \quad Q\left(\frac{3}{4}\right) = 1 \quad Q\left(-\frac{3}{2}\right) = 4 \quad Q\left(\frac{5}{6}\right) = \frac{8}{9}$$

$$[16] \quad Q(3) = \frac{3}{2} \quad Q\left(\frac{2}{5}\right) = -\frac{2}{3} \quad Q\left(-\frac{3}{10}\right) = -\frac{5}{4}$$

$$[18] \quad Q(-1) = \frac{7}{3} \quad Q(2) = -\frac{8}{3} \quad Q\left(-\frac{4}{5}\right) = 2$$

$$[20] \quad Q\left(\frac{1}{2}\right) = \frac{5}{14} \quad Q\left(-\frac{1}{2}\right) = \frac{9}{14} \quad Q\left(\frac{7}{4}\right) = 0$$