

Mathématiques

Test d'entraînement

3M

Réponses valides

Exemples de réponses non valides

(Ces réponses ne rapportent aucun point.)

1.  $12$

$\frac{36}{3}$

$\frac{12}{1}$

2.  $\frac{9}{10}$

0,9

$\frac{18}{20}$

$\frac{2}{3+\frac{4}{3}}$

3.  $72$

$\frac{7200}{100}$

4.  $8$

$\begin{pmatrix} 2 \\ 6 \end{pmatrix}$

$2 + 6$

5.  $x \in \left\{-\frac{2}{3}; 1\right\}$     $x \in \left\{1; -\frac{2}{3}\right\}$     $x = 1$  ou  $-\frac{2}{3}$

$S = \left\{-\frac{2}{3}; 1\right\}$     $S = \left\{1; -\frac{2}{3}\right\}$

$\left\{-\frac{2}{3}; 1\right\}$     $\left\{1; -\frac{2}{3}\right\}$

$x = \left\{-\frac{2}{3}; 1\right\}$

$S = \left(-\frac{2}{3}; 1\right)$

$S = \left\{\frac{1+5}{6}\right\}$

$\left(-\frac{2}{3}; 1\right)$

$x \in \{0; \frac{1}{5}\}$	$x \in \{\frac{1}{5}; 0\}$	$x = 0$ ou $\frac{1}{5}$	$x = \{0; \frac{1}{5}\}$	$x = \{0; 0; \frac{1}{5}\}$
6. $S = \{0; \frac{1}{5}\}$	$S = \{\frac{1}{5}; 0\}$		$S = (0; \frac{1}{5})$	$S = (0; 0; \frac{1}{5})$
$\{0; \frac{1}{5}\}$	$\{\frac{1}{5}; 0\}$		$(0; \frac{1}{5})$	$(0; 0; \frac{1}{5})$

$x \in \{-4; 4\}$	$x \in \{4; -4\}$	$x = 4$ ou $-4$	$x = \{-4; 4\}$	$x = 4$
7. $S = \{-4; 4\}$	$S = \{4; -4\}$	$S = \{\pm 4\}$	$S = (-4; 4)$	$x = -4$
$\{-4; 4\}$	$\{4; -4\}$	$x = \pm 4$	$(-4; 4)$	

	$x \in [-2; 2[$		$x = [-2; 2[$	$x \in [-2; 2]$
8.	$S = [-2; 2[$		$S \in [-2; 2[$	$x \in [2; -2[$
	$[-2; 2[$			

9.	$2x - 3$	quotient = $2x - 3$	8	$P(x) = (x + 3)(2x - 3) + 10$
----	----------	---------------------	---	-------------------------------

10.	10	reste = 10	$r = 10$	$2x - 3$
-----	----	------------	----------	----------

11.  $f'(x) = 4x^{11} - 2x$        $4x^{11} - 2x$        $f(x) = 4x^{11} - 2x$        $\frac{12}{3}x^{11} - 2x$

12.  $f'(x) = \frac{-2}{(x+1)^3}$        $f(x) = -2 \cdot \frac{1}{(x+1)^3}$        $f'(x) = \frac{-2 \cdot (x+1)}{(x+1)^4}$

$f'(x) = -2 \cdot \frac{1}{(x+1)^3}$        $f'(x) = \frac{0 \cdot (x+1)^2 - 2 \cdot (x+1)}{(x+1)^4}$

$f'(x) = -2 \cdot (x+1)^{-3}$

13.  $f'(x) = 2 \sin(-2x)$        $f(x) = 2 \sin(-2x)$

$f'(x) = \sin(-2x) \cdot 2$        $f'(x) = (-\sin(-2x)) \cdot (-2)$

$2 \cdot \sin(-2x)$        $f'(x) = \sin(-4x)$

14.  $f'(x) = 4 \cdot (x^3 - 5x + 2)^3 \cdot (3x^2 - 5)$        $f'(x) = 4 \cdot (x^3 - 5x + 2)^3$

$f'(x) = (x^3 - 5x + 2)^3 \cdot (12x^2 - 20)$        $f'(x) = (4x^3 - 20x + 8)^3 \cdot (3x^2 - 5)$

$4 \cdot (x^3 - 5x + 2)^3 \cdot (3x^2 - 5)$        $f'(x) = 4 \cdot (x^3 - 5x + 2)^3 + (3x^2 - 5)$

15.  $x \in \{0; 1\}$        $x \in \{1; 0\}$        $x = 0$  ou  $1$        $x = \{0; 1\}$        $x = 0$

$S = \{0; 1\}$        $S = \{1; 0\}$        $S = (0; 1)$        $x = 1$

$\{0; 1\}$        $\{1; 0\}$        $(0; 1)$

$$x \in \{-2\}$$

$$x = \{-2\}$$

16.

$$x = -2$$

$$x = \frac{\log(\frac{1}{9})}{\log(3)}$$

$$\{-2\}$$

17. (a)

$$(a-1) \cdot \frac{1}{a+2}$$

$$\frac{a-1}{a+2}$$

$$(a-1) \cdot f(a)$$

$$a-1 \cdot \frac{1}{a+2}$$

17. (b)

$$\frac{1}{50}$$

$$0,02$$

$$\frac{1}{48+2}$$

$$2x + 6y = 22$$

$$x + 3y = 11$$

$$2x + 6y + 22 = 0$$

18.

$$2x + 6y - 22 = 0$$

$$x + 3y - 11 = 0$$

$$2x + 6y - 22$$

$$-2x - 6y + 22 = 0$$

$$-x - 3y + 11 = 0$$

$$x + 3y - 11$$

19.

$$x - 3y = -9$$

$$x - 3y + 9 = 0$$

$$x - 3y + 9$$

$$3x + y - 23 = 0$$

20.

$$I(0; -2)$$

$$(x; y) = (0; -2)$$

$$0 \text{ et } -2$$

$$S = \{(0; -2)\}$$

$$x = 0 \text{ et } y = -2$$

$$I = (0; -2)$$

21.

