

CASA DA AULA – Centro de Explicações	Ano letivo 20 /20	Matemática 6.º ano
Nome do Aluno	Turma	N.º
Professor		Data / /20

1. Considera os números representados na figura 1.

1.1. Escreve os divisores naturais de:

$$D_{12} = \underline{\hspace{2cm}}$$

$$D_{15} = \underline{\hspace{2cm}}$$

$$D_{20} = \underline{\hspace{2cm}}$$

$$D_{25} = \underline{\hspace{2cm}}$$

$$D_{37} = \underline{\hspace{2cm}}$$

$$D_{38} = \underline{\hspace{2cm}}$$

$$D_{45} = \underline{\hspace{2cm}}$$

$$D_{80} = \underline{\hspace{2cm}}$$

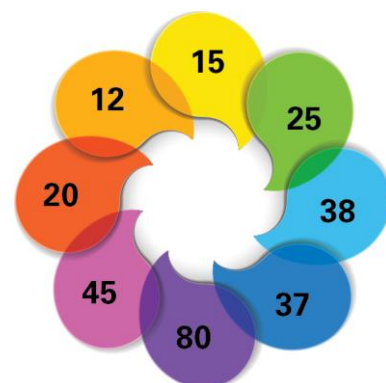


Figura 1

1.2. Indica um par de números primos entre si.

1.3. Escreve os divisores comuns de:

1.3.1. 12 e 15

1.3.2. 25 e 80

1.3.3. 20 e 38

1.4. Completa.

1.4.1. m.d.c. (20 , 25) = _____

1.4.2. m.d.c. (45 , 80) = _____

1.4.3. m.d.c. (25 , 45) = _____

1.4.4. m.d.c. (20 , 80) = _____

2. Calcula.

2.1. m.m.c. (3 , 6)

2.2. m.m.c. (20 , 80)

2.3. m.m.c. (12 , 20)

2.4. m.m.c. (10 , 80)

3. Calcula.

3.1.
$$\frac{50 \times 3 + 50 \times 2}{50}$$

3.2.
$$\frac{81 \times 81 - 81 \times 80}{81}$$

3.3.
$$\frac{\frac{1}{3} \times 5 - \frac{1}{3} \times 2}{\frac{1}{3}}$$

3.4.
$$\frac{\frac{5}{12} \times 7 - \frac{5}{12} \times 6}{\frac{5}{12}}$$

4. Utiliza o algoritmo de Euclides para determinares:

4.1. m.d.c. (250 , 225)

4.2. m.d.c. (962 , 1813)

5. Utiliza o algoritmo de Euclides para determinares os divisores comuns de:

5.1. 400 e 272

5.2. 333 e 441

6. Associa a cada expressão o seu valor numérico.

$2 \times 25 : 5 : \frac{5}{2}$	•	• $\frac{11}{29}$
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$\frac{1}{2} : \frac{1}{3} \times 2 + 5 \times 2$	•	• $\frac{5}{7}$
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$\left(\frac{5}{4} + 1\frac{1}{2}\right) : 7\frac{1}{4}$	•	• 3
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$\left(2\frac{1}{3} + \frac{1}{3} : 5\right) \times 15$	•	• 49
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$\frac{2\frac{1}{2} : 2\frac{1}{3}}{\frac{1}{2} + 1}$	•	• $\frac{1}{8}$
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• 4

$\frac{0,2}{2\frac{1}{3}} \times \frac{7 \times 35}{7}$	•	• $\frac{1}{5}$
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$3\frac{1}{2} : \frac{1}{0,3} \cdot \frac{1}{0,5}$	•	• 13
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$\frac{7 \times 7 \times 7 \times 7 \times 7 \times 7}{7 \times 7 \times 7 \times 7 \times 7} : \frac{7 \times 7}{7 \times 7 \times 7}$	•	• 36
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$\frac{2 \times \frac{1}{2} \times 3\frac{1}{2} - 1}{\frac{1}{0,2}}$	•	• $\frac{35}{3}$
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• $\frac{27}{8}$

$2 + \frac{3}{2} \times \frac{1}{3} : \frac{1}{4} - \frac{\frac{1}{2}}{0,8}$	•	• $\frac{1}{2}$
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Soluções:

1.1. $D_{12} = \{1, 2, 3, 4, 6, 12\}$

$D_{15} = \{1, 3, 5, 15\}$

$D_{20} = \{1, 2, 4, 5, 10, 20\}$

$D_{25} = \{1, 5, 25\}$

$D_{37} = \{1, 37\}$

$D_{38} = \{1, 2, 19, 38\}$

$D_{45} = \{1, 3, 5, 9, 15, 45\}$

$D_{80} = \{1, 2, 4, 5, 8, 10, 16, 20, 40, 80\}$

1.2. Por exemplo, 12 e 25.

1.3.1. 1 e 3

1.3.2. 1 e 5

1.3.3. 1 e 2

1.4.1. 5

1.4.2. 5

1.4.3. 5

1.4.4. 20

2.1. 6

2.2. 80

2.3. 60

2.4. 80

3.1. 5

3.2. 1

3.3. 3

3.4. 1

4.1. 25

4.2. 37

5.1. 1, 2, 4, 8 e 16

5.2. 1, 3 e 9

6.

$$2 \times 25 : 5 = \frac{5}{2}$$

$$\frac{1}{2} : \frac{1}{3} \times 2 + 5 \times 2$$

$$\left(\frac{5}{4} + 1\frac{1}{2}\right) : 7\frac{1}{4}$$

$$\left(2\frac{1}{3} + \frac{1}{3} : 5\right) \times 15$$

$$\frac{2\frac{1}{2} : 2\frac{1}{3}}{\frac{1}{2} + 1}$$

$$\frac{0,2}{2\frac{1}{3}} \times \frac{7 \times 35}{7}$$

$$\frac{3\frac{1}{2} : \frac{1}{2}}{0,3 : 0,5}$$

$$\frac{7 \times 7 \times 7 \times 7 \times 7 \times 7}{7 \times 7 \times 7 \times 7 \times 7} : \frac{7 \times 7}{7 \times 7 \times 7}$$

$$\frac{2 \times \frac{1}{2} \times 3\frac{1}{2} - 1}{\frac{1}{0,2}}$$

$$2 + \frac{3}{2} \times \frac{1}{3} : \frac{1}{4} - \frac{1}{2} \div 0,8$$

