

MATEMATIKA

Jméno a příjmení

DIDAKTICKÝ TEST – STRANA 1–4

1

37,5 %

2

$\frac{48}{5}$ min

3

3.1 Uveďte postup řešení.

$$\left(\frac{8}{7} - \frac{7}{8}\right) : \frac{15}{28} = \left(\frac{64 - 49}{56}\right) : \frac{15}{28} = \frac{15}{56} \cdot \frac{28}{15} = \frac{1}{2}$$

3.2 Uveďte postup řešení.

$$\begin{aligned} \frac{\frac{3}{10} - \frac{6}{5} : \frac{4}{3}}{\frac{5}{6} \cdot \frac{2}{2} - \frac{4}{3}} &= \frac{\frac{3}{10} - \frac{6}{5} \cdot \frac{3}{4}}{\frac{25}{12} - \frac{4}{3}} = \frac{\frac{3}{10} - \frac{9}{10}}{\frac{25}{12} - \frac{4}{3}} = \frac{-\frac{6}{10}}{\frac{9}{12}} = \\ &= -\frac{6}{10} \cdot \frac{12}{9} = -\frac{2}{5} \cdot \frac{6}{3} = -\frac{12}{15} = -\frac{4}{5} \end{aligned}$$

4

4.1 $64 - 64x + 16x^2$	4.2 $(10 - 2x)(10 + 2x)$
4.3 Uved'te postup řešení. $(3x - 7)(x + 4) + 4(7 + x) = 3x^2 + 12x - 7x - 28 +$ $+28 + 4x = 3x^2 + 9x = 3x(x + 3)$	

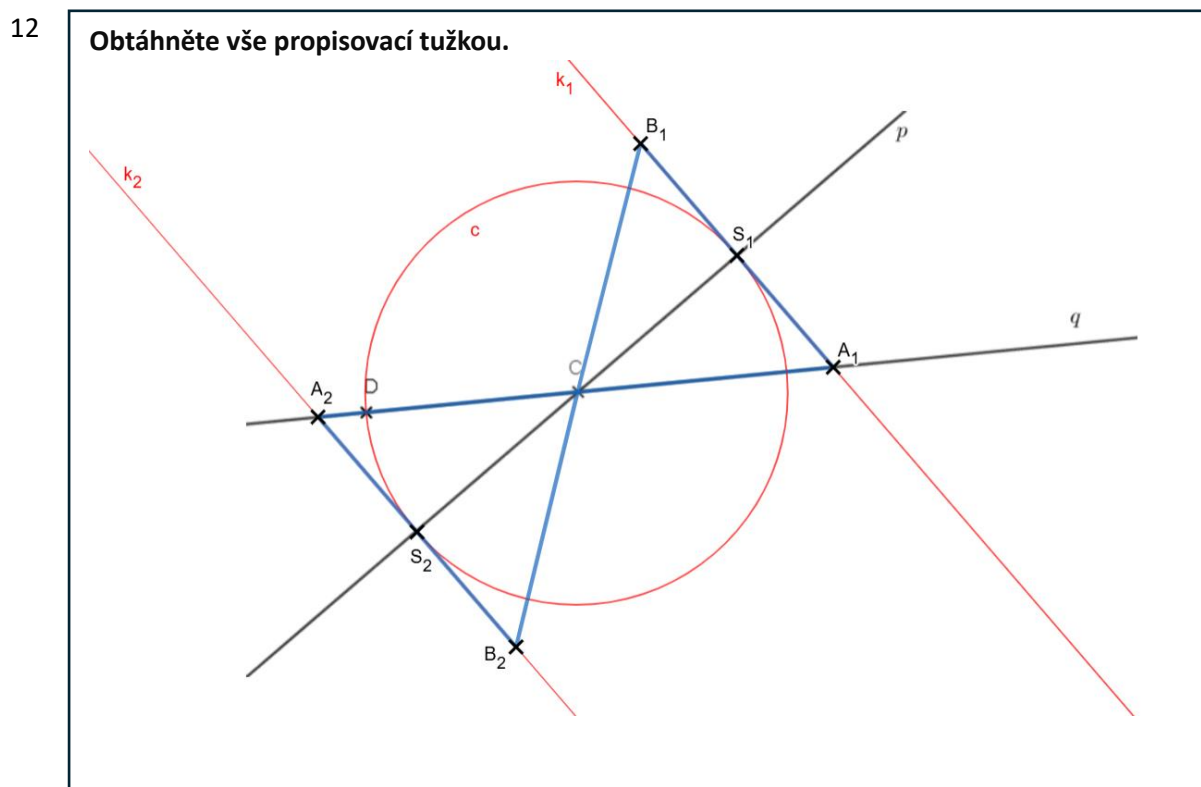
5

5.1 Uved'te postup řešení. $\frac{4y - 3}{6} - \frac{2y}{3} = \frac{8 - y}{12} - \frac{3}{4} / \cdot 12$ $8y - 6 - 8y = 8 - y - 9$ $-6 = -y - 1$ $y = 5$
5.2 Uved'te postup řešení. $(3 - x)^2 + 4(x - 5) = \frac{1}{2}x(2x - 3) / \cdot 2$ $2(3 - x)^2 + 8(x - 5) = x(2x - 3)$ $2(9 - 6x + x^2) + 8(x - 5) = x(2x - 3)$ $18 - 12x + 2x^2 + 8x - 40 = 2x^2 - 3x$ $2x^2 - 4x - 22 = 2x^2 - 3x$ $-4x - 22 = -3x$ $-x = 22$ $x = -22$

6	6.1	4	6.2	$\sqrt{58}$

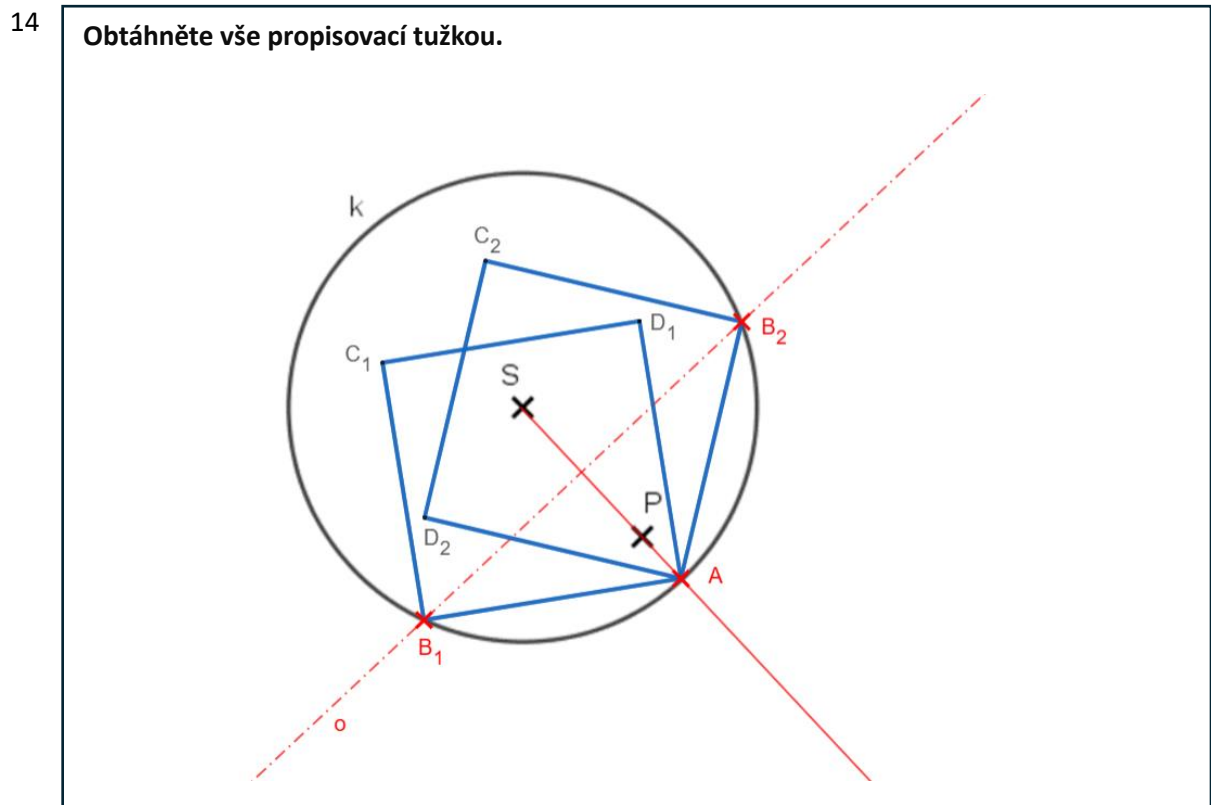
7	A	N		A	B	C	D	E	F
7.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11	11.1 Uvedte postup řešení. $V = 3,14r^2v = 3454 \text{ cm}^3 =$ $= 3454 \text{ ml} = 3,454 \text{ dm}^3 = 3,454 \text{ l} =$ $= 0,003454 \text{ m}^3$ $V = \frac{22}{7}r^2v \doteq 3457 \text{ cm}^3 =$ $= 3457 \text{ ml} = 3,457 \text{ dm}^3 = 3,457 \text{ l} =$ $= 0,003457 \text{ m}^3$	11.2 25



13

13.1	120
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15

15.1	15.2	15.3
220 m	50 m	2800 m ²

	A	B	C	D	E	F
16.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
16.2	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>