

MATH 6

HANDOUT 19: SOLVING EQUATIONS AND INEQUALITIES - MORE PRACTICE

HOMEWORK

1. Solve the following inequalities. Show the result using interval notation.

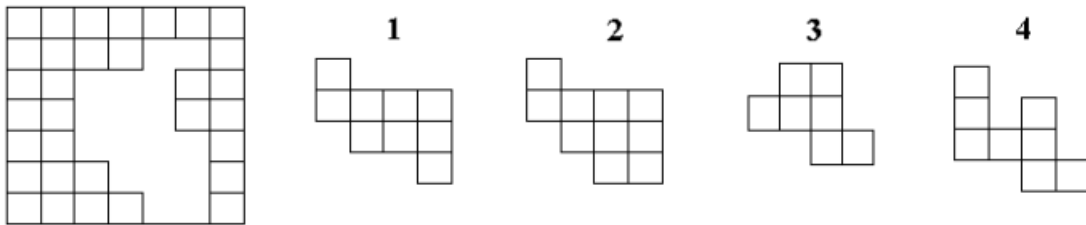
(a) $\frac{x-3}{2} < -5$ (b) $-2 < \frac{6-2x}{3} < 4$ (c) $5x - (x+2) > -5(1+x) + 3$
 (d) $1 + 2x < 3x$ (e) $x - 1 < -7$

2. Solve the following equations and inequalities and show your result using interval notation (where applicable):

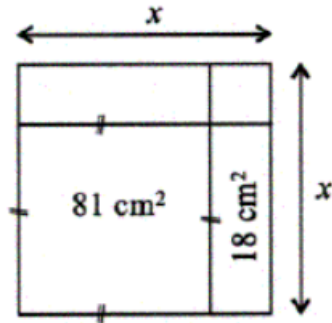
(a) $(x+1)(x-3) > 0$ (b) $x(x-1) < 0$ (c) $\frac{1}{x+1} > 2$
 (d) $x^2 - 9 = 0$ (e) $\frac{x}{x-1} > 1$

3. Graph $y = |x - 2|$. Label your graph, show the points chosen.

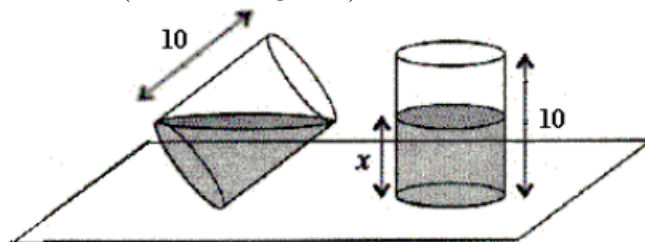
4. Select 2 pieces on the right to cover the missing area of the figure on the left. (Math Kangaroo)



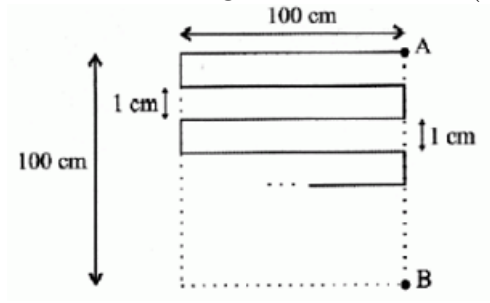
5. Find x . (Math Kangaroo)



6. What is x ? (Math Kangaroo)



7. What is the length from A to B? (Math Kangaroo)



8. Given five isosceles right triangles, what is the shaded area? (Math Kangaroo)

