

改正: 最长的边=AB=29

左方=AB<sup>2</sup>=29<sup>2</sup>=841

右方=AC<sup>2</sup>+BC<sup>2</sup>=20<sup>2</sup>+21<sup>2</sup>=841

∴左方=右方

∴AB<sup>2</sup>=AC<sup>2</sup>+BC<sup>2</sup>

∴∠ACB=90° (毕达哥拉斯定理的逆定理)

∴是直角三角形

最长的边=7.4

左方=BC<sup>2</sup>=7.4<sup>2</sup>=54.76

右方=AC<sup>2</sup>+AB<sup>2</sup>=2.4<sup>2</sup>+7<sup>2</sup>=54.76

∴左方=右方

∴BC<sup>2</sup>=AC<sup>2</sup>+AB<sup>2</sup>

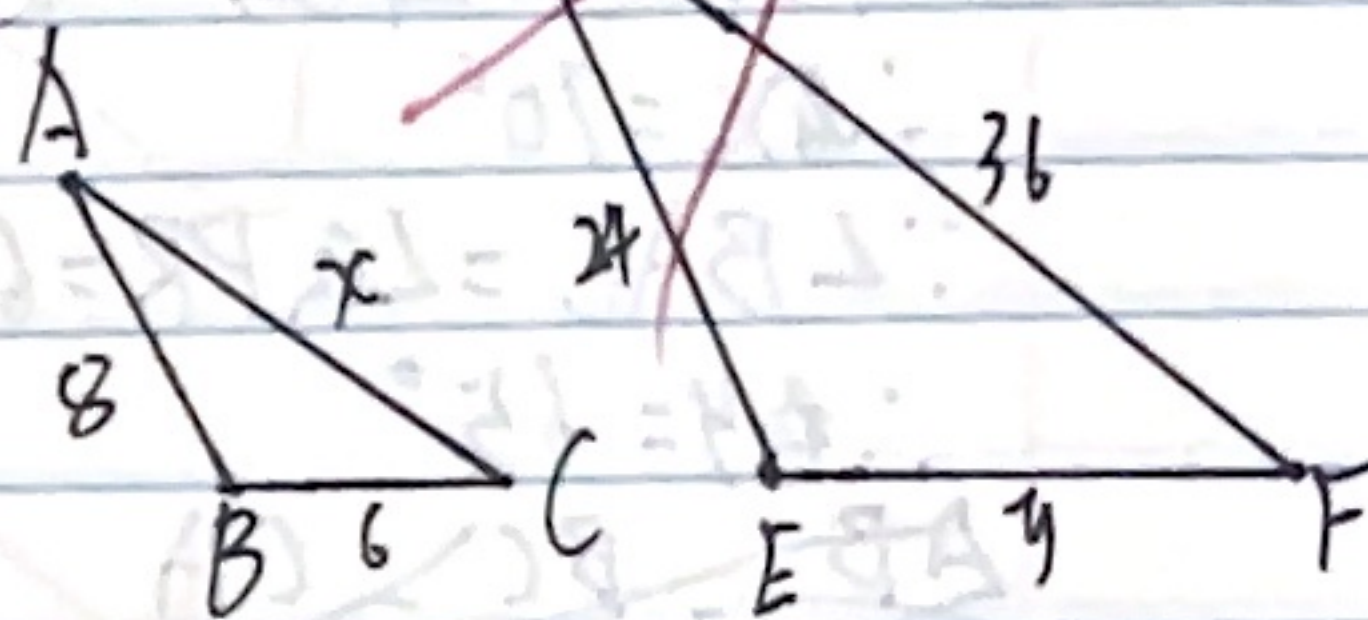
∴∠BAC=90° (毕达哥拉斯定理的逆定理)

∴是直角三角形

HW18 Ex 1.1

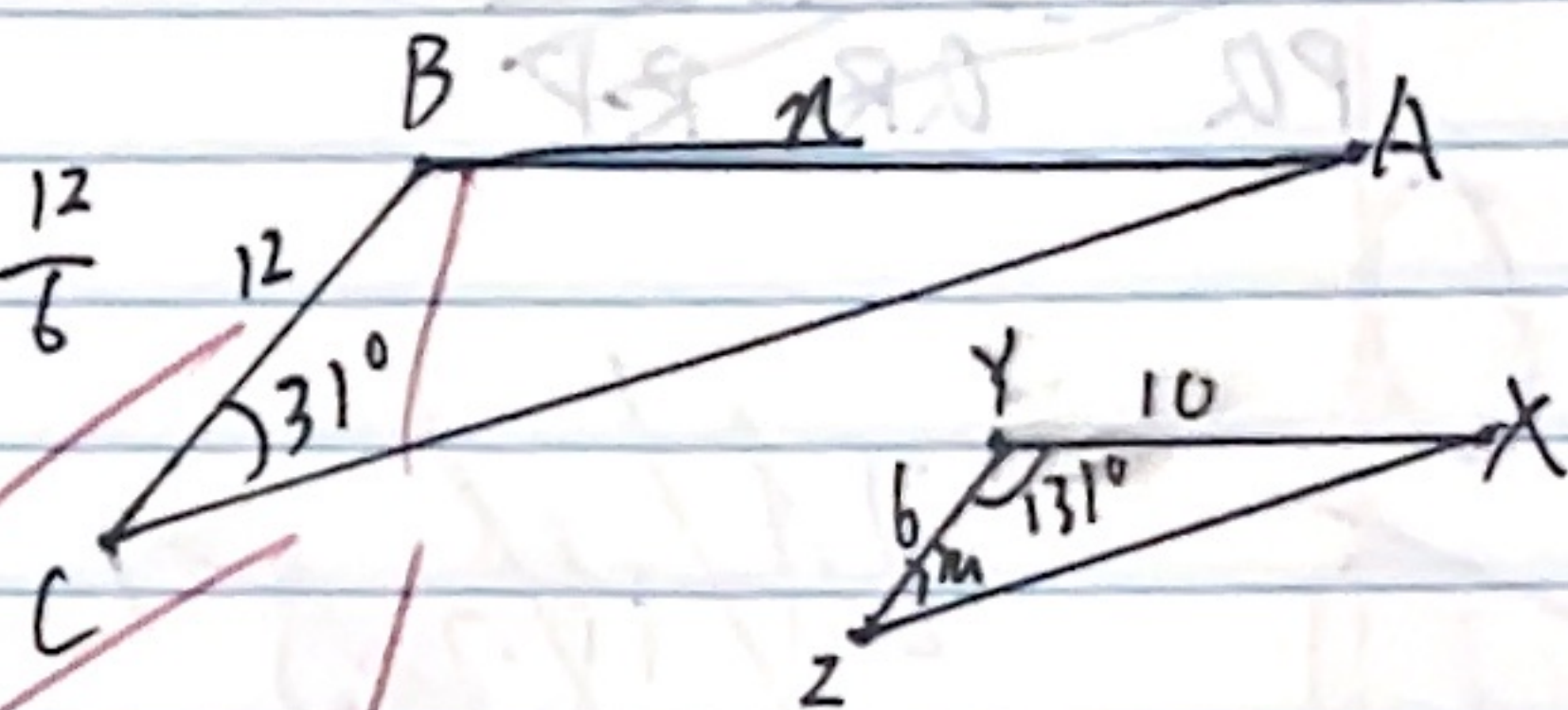
6.  $\frac{AB}{DE} = \frac{BC}{EF} = \frac{CA}{FD} = \frac{8}{24} = \frac{1}{3} = \frac{x}{36}$   
 $\frac{8}{24} = \frac{1}{3} \Rightarrow y = 18$   
 $\frac{8}{24} = \frac{x}{36} \Rightarrow x = 12$

△ABC ∽ △DEF



△ABC ∽ △XYZ

7.  $\frac{AB}{XY} = \frac{BC}{YZ} = \frac{CA}{ZX} = \frac{n}{10} = \frac{12}{6}$   
 $\frac{n}{10} = \frac{12}{6} \Rightarrow n = 20$



∴∠BCA=∠YZX=31°

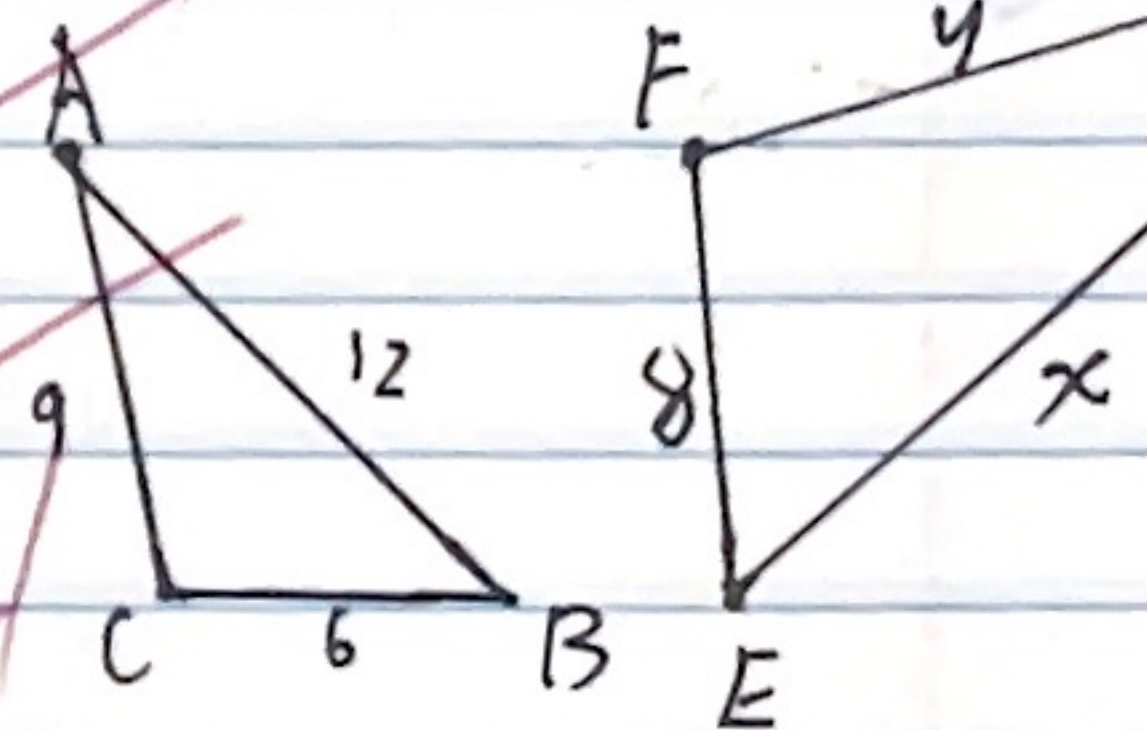
∴∠m=31°

8.  $\frac{AB}{DE} = \frac{BC}{EF} = \frac{CA}{FD} = \frac{12}{x} = \frac{6}{8} = \frac{9}{y}$

$\frac{12}{x} = \frac{6}{8} \Rightarrow x = 16$

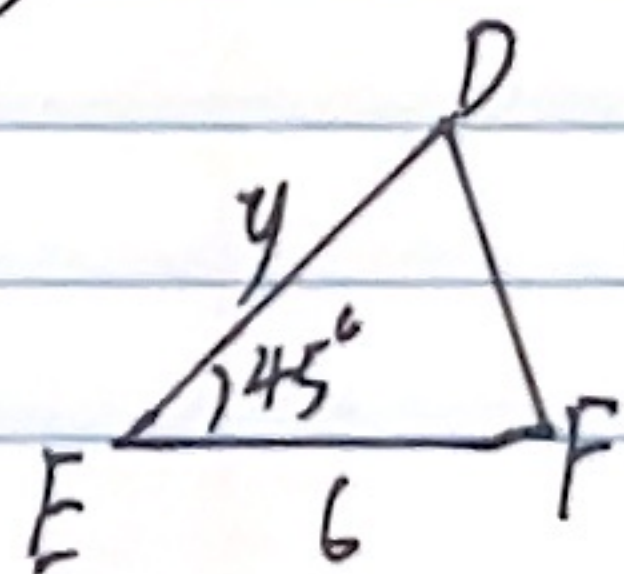
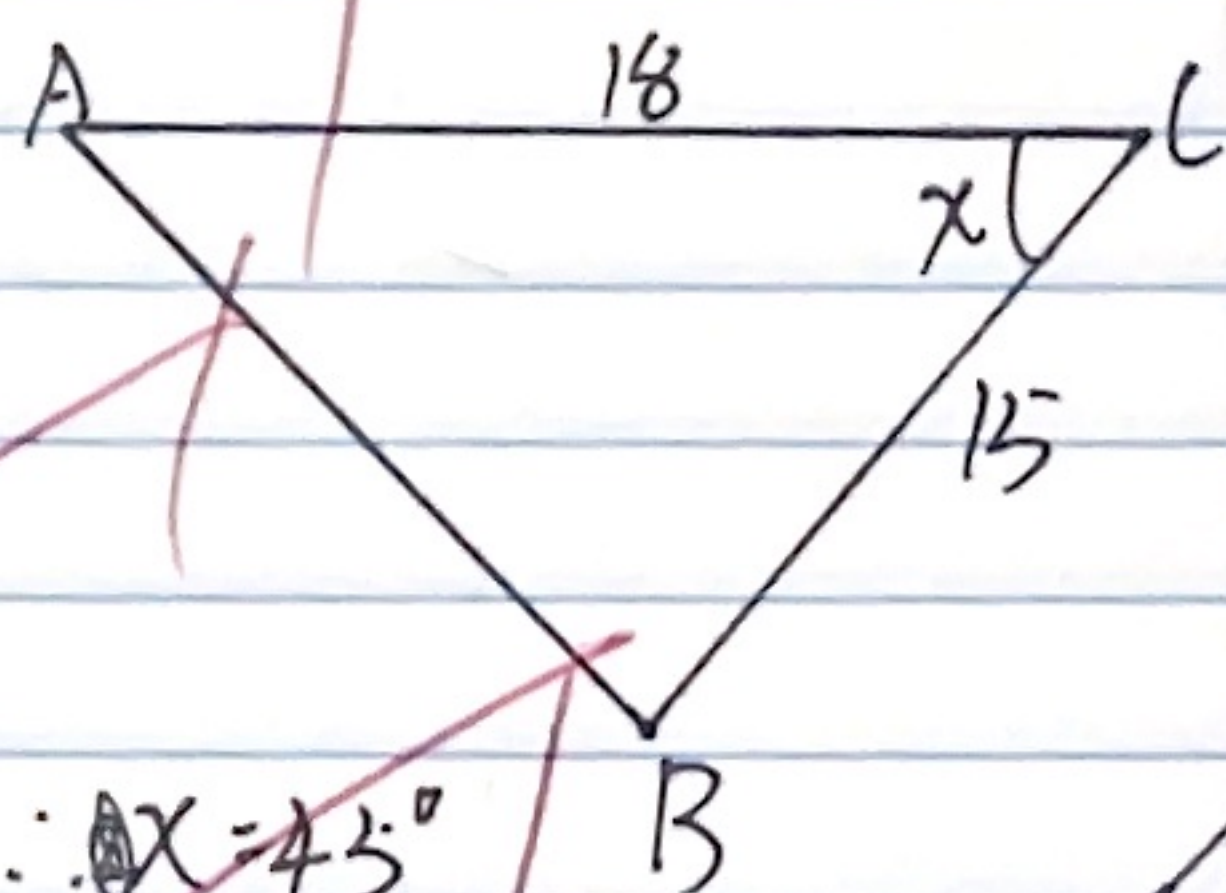
$\frac{9}{y} = \frac{6}{8} \Rightarrow y = 12$

△ABC ∽ △DEF



9.  $\frac{AB}{FD} = \frac{BC}{DE} = \frac{CA}{EF} = \frac{15}{y} = \frac{18}{6}$   
 $\frac{15}{y} = \frac{18}{6} \Rightarrow y = 5$

∴∠ACB=∠FED=45° ∴∠x=45°



(a)

$$9. \frac{3x}{8} \leq \frac{x}{6} + \frac{1}{4}$$

$$\frac{3x}{8} \leq \frac{2x}{12} + \frac{3}{12}$$

$$\frac{3x}{8} \leq \frac{2x+3}{12}$$

$$3x(12) \leq 8(2x+3)$$

$$36x \leq 16x + 24$$

$$20x \leq 24$$

$$x \leq 1.2$$

or

$$\frac{3x}{8} \leq \frac{x}{6} + \frac{1}{4}$$

$$\frac{3x}{8} - \frac{x}{6} \leq \frac{1}{4}$$

$$\frac{5x}{24} \leq \frac{1}{4}$$

$$20x \leq 24$$

$$x \leq 1.2$$

(b)  $\frac{3-x}{2} > 2x+7$

$$3-x > 2(2x+7)$$

$$3-x > 4x+14$$

$$-5x > 11$$

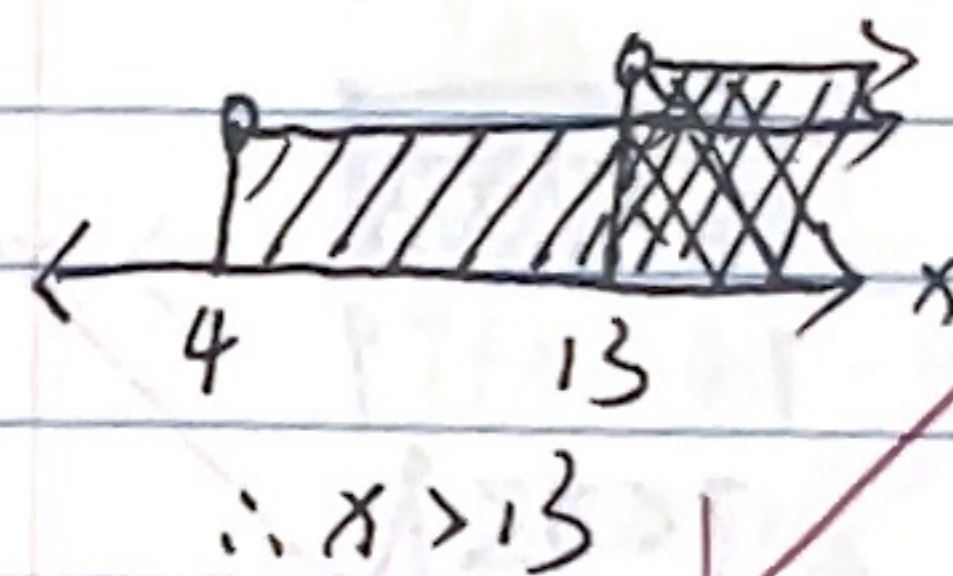
$$x < -\frac{11}{5}$$

✓ good!

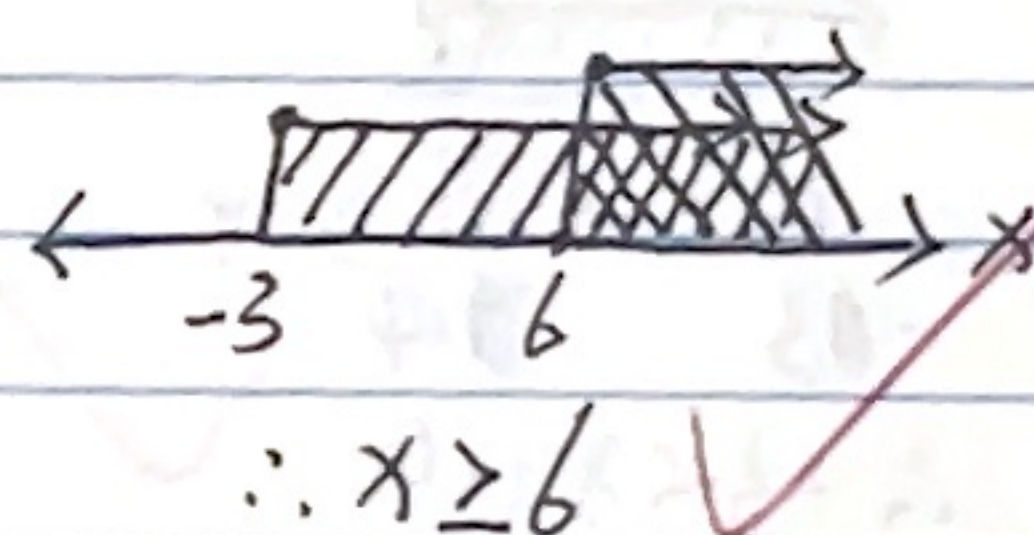
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HWS (a) Ex 1.3A (1, 2, 3)

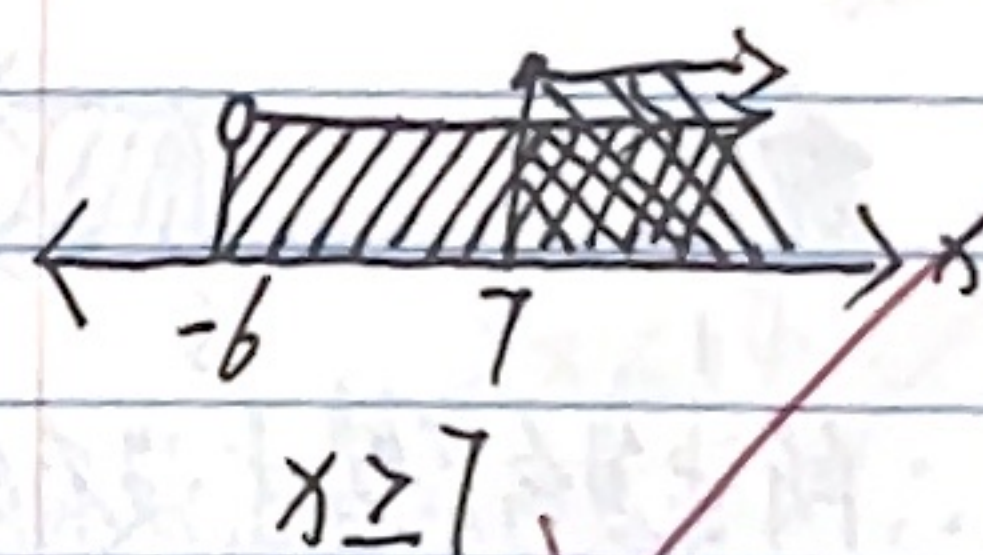
1.  $x > 4$  及  $x > 13$



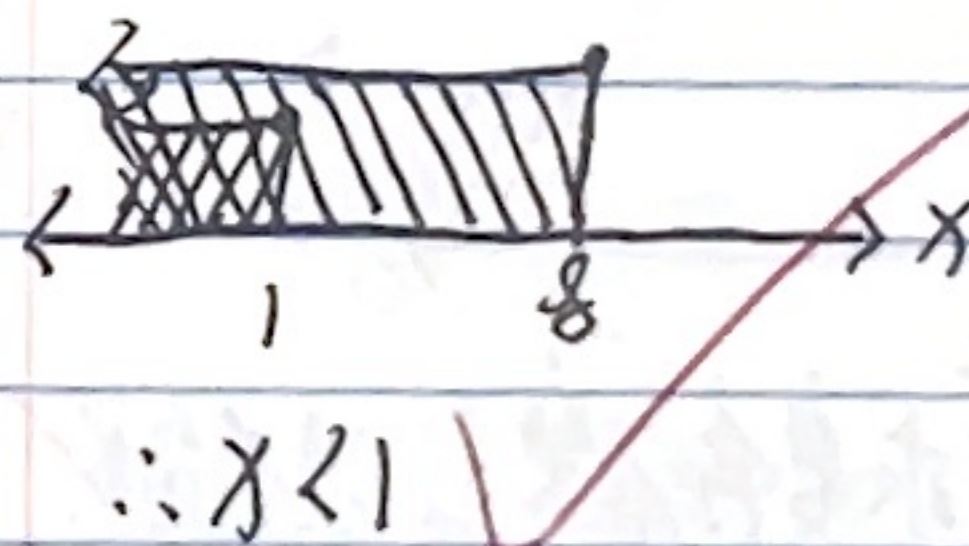
(b)  $x \geq 6$  及  $x \geq -3$



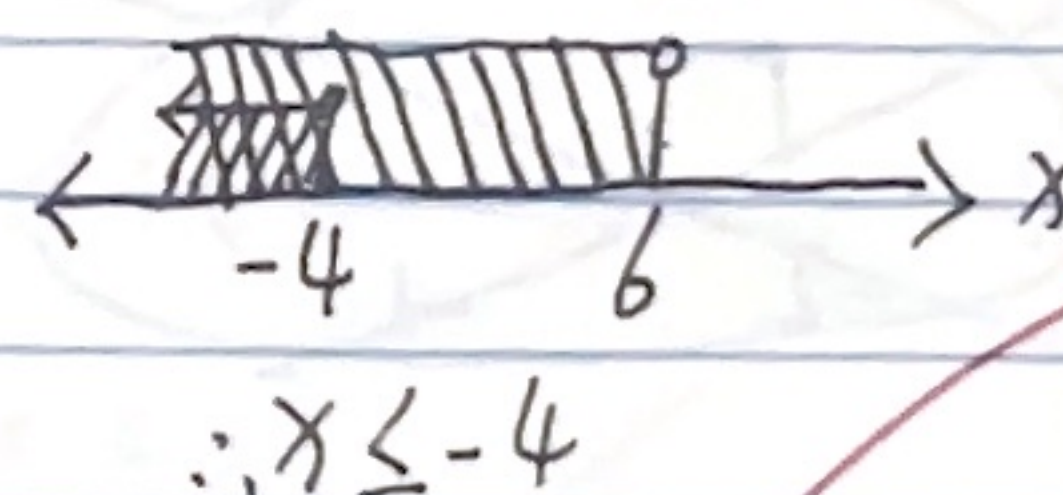
(c)  $x > -6$  及  $x \geq 7$



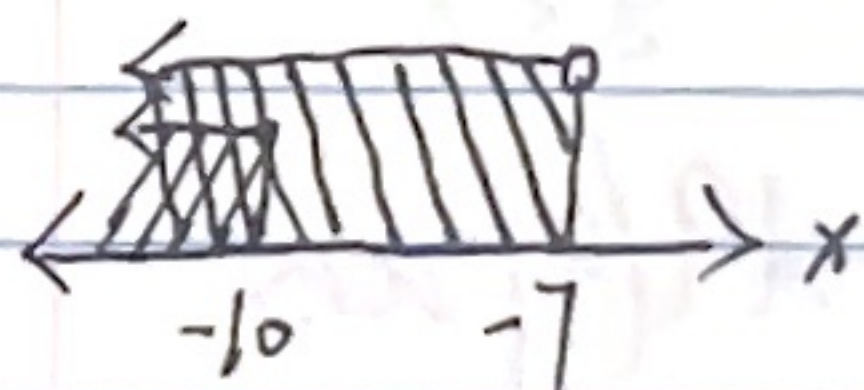
2. (a)  $x < 1$  及  $x < 8$



(b)  $x < 6$  及  $x \leq -4$



(c)  $x \leq -10$  及  $x < -7$



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2. (a)  $x < 1$  或  $x < 8$

