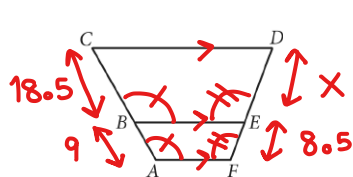


Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: 81b664bc

2.1



$$\frac{9}{8.5} = \frac{18.5}{X} \rightarrow \text{similar shape}$$

$$X = 17.47 \approx 17.5 //$$

In the figure above, $\overline{AF}$, $\overline{BE}$, and $\overline{CD}$ are parallel. Points B and E lie on $\overline{AC}$ and $\overline{FD}$, respectively. If $\underline{AB = 9}$, $\underline{BC = 18.5}$, and $\underline{FE = 8.5}$, what is the length of $\underline{\overline{ED}}$, to the nearest tenth?

1 decimal

A. 16.8

~~X~~ 17.5

C. 18.4

D. 19.6

Question ID 94364a79

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: 94364a79

similar

2.2

Two nearby trees are perpendicular to the ground, which is flat. One of these trees is 10 feet tall and has a shadow that is 5 feet long. At the same time, the shadow of the other tree is 2 feet long. How tall, in feet, is the other tree?

- A. 3
- ~~B. 4~~
- C. 8
- D. 27

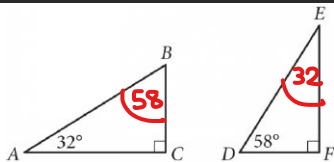
$$\begin{array}{ccc}
 \begin{array}{c} 10 \\ | \\ \hline 5 \end{array} & & \begin{array}{c} \times \\ | \\ \hline 2 \end{array} \\
 & & \\
 \frac{10}{5} = \frac{\times}{2} & & \\
 \times = 4 // & &
 \end{array}$$

Question ID 933fee1a

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: 933fee1a

2.3



similar / congruent

Triangles ABC and DEF are shown above. Which of the

following is equal to the ratio $\frac{BC}{AB}$? $\rightarrow \frac{\text{ကျန် 32}}{\text{ကျန် 90}} \approx \frac{DF}{DE} //$

A. $\frac{DE}{DF}$

~~B. $\frac{DF}{DE}$~~

C. $\frac{DF}{EF}$

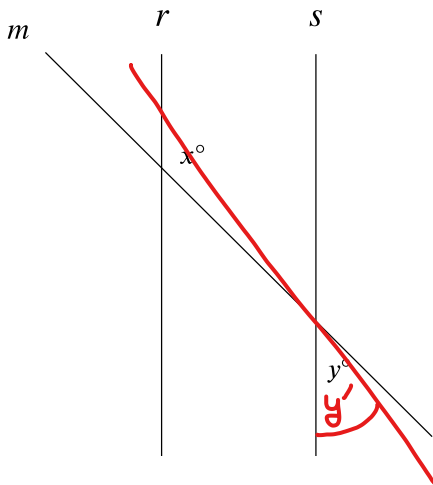
D. $\frac{EF}{DE}$

Question ID a4c05a1b

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: a4c05a1b

2.4



Note: Figure not drawn to scale.

In the figure shown, lines r and s are parallel, and line m intersects both lines. If $y < 65$, which of the following must be true?

A. $x < 115$

~~B. $x > 115$~~

C. $x + y < 180$

D. $x + y > 180$

$$x + y = 180^\circ$$

Question ID d3fe472f

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: d3fe472f

2.5

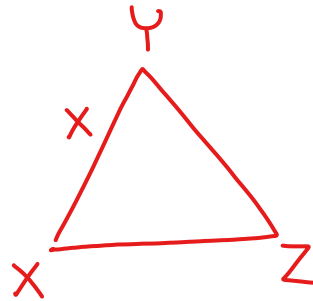
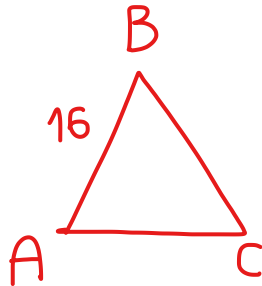
Triangle ABC is similar to triangle XYZ , such that A , B , and C correspond to X , Y , and Z respectively. The length of each side of triangle XYZ is 2 times the length of its corresponding side in triangle ABC . The measure of side AB is 16. What is the measure of side XY ?

A. 14

B. 16

C. 18

~~D. 32~~



$$\begin{aligned}
 S_{XYZ} &= 2S_{ABC} \\
 X &= 2(16) \\
 &= 32 //
 \end{aligned}$$

Question ID fd8745fc

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: fd8745fc

2.6

In triangle JKL , the measures of $\angle K$ and $\angle L$ are each 48° . What is the measure of $\angle J$, in degrees? (Disregard the degree symbol when entering your answer.)

$$180 - 48 - 48 = 84 //$$

Question ID 901e3285

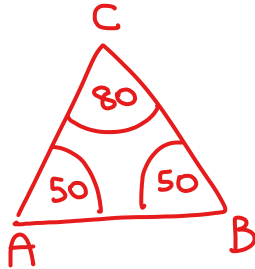
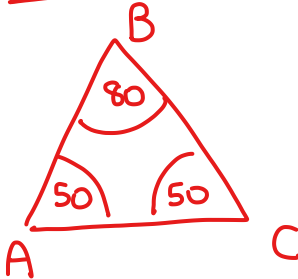
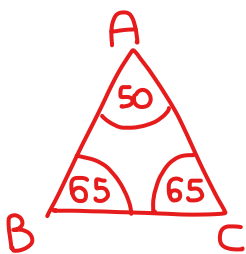
Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: 901e3285

2.7

In triangle ABC , the measure of angle A is 50° . If triangle ABC is isosceles, which of the following is NOT a possible measure of angle B ?

- A. 50° ✓
- B. 65° ✓
- C. 80° ✓
- ~~D. 100°~~

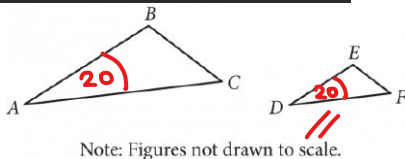


Question ID 1c3d613c

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: 1c3d613c

2.8



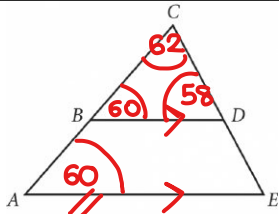
Triangle ABC and triangle DEF are shown. The relationship between the side lengths of the two triangles is such that $\frac{AB}{DE} = \frac{BC}{EF} = \frac{AC}{DF} = 3$. If the measure of angle BAC is 20° , what is the measure, in degrees, of angle EDF ? (Disregard the degree symbol when gridding your answer.)

Question ID 6dd463ca

Assessment	Test	Domain	Skill	Difficulty
SAT	Math	Geometry and Trigonometry	Lines, angles, and triangles	

ID: 6dd463ca

2.9



Note: Figure not drawn to scale.

In the figure above, segments AE and BD are parallel. If angle BDC measures 58° and angle ACE measures 62° , what is the measure of angle CAE ?

- A. 58°
- ~~B. 60°~~
- C. 62°
- D. 120°