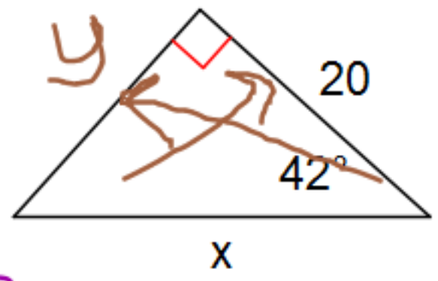
Solve the triangle. Communicate your solution carefully. Side: nearest tenth. Angle: nearest degree.

Mar. 6

1)



x

y

z

$\angle z = 180 - (90 + 42)$

$\angle z = 48^\circ$

$\angle x = 90^\circ$ $x = 26.9$

$\angle y = 42^\circ$ $y = 18$

$\angle z = 48^\circ$ $z = 20$

$\frac{x \cos 42^\circ}{\cos 42^\circ} = \frac{20}{\cos 42^\circ}$

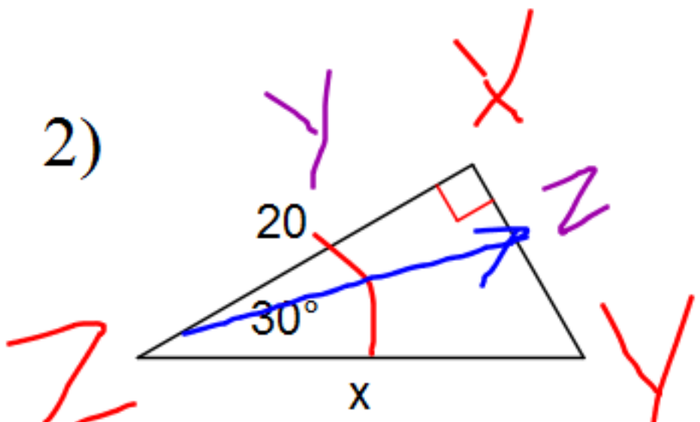
$x = 26.9$

$\cos 42^\circ = \frac{A}{H}$

$\cos 42^\circ = \frac{20}{x}$

Solve the triangle. Communicate your solution carefully. Side: nearest tenth. Angle: nearest degree.

2)



$\angle X = 90^\circ$ $x = 23.1$

$\angle Y = 60^\circ$ $y = 20$

$\angle Z = 30^\circ$ $z = 11.5$

$180 - (30 + 90) = 60^\circ$

$\cos 30 = \frac{A}{H}$

$\cos 30 = \frac{20}{x}$

$x \cos 30 = 20$

$\frac{x \cos 30}{\cos 30} = \frac{20}{\cos 30}$

$x = 23.1$

$\tan 30 = \frac{O}{A}$

$\tan 30 = \frac{z}{20}$

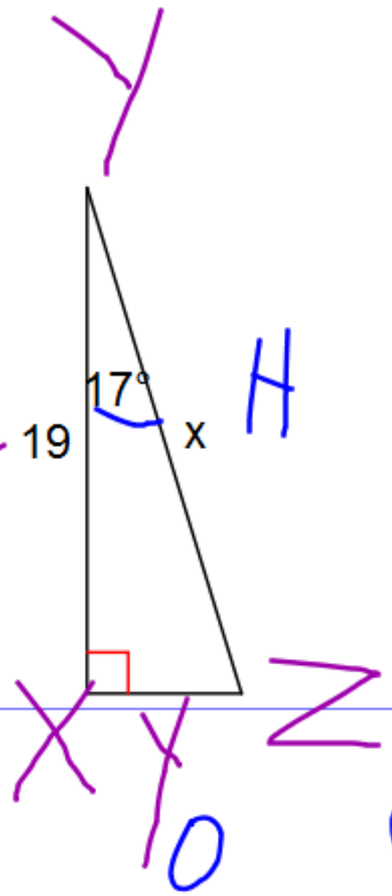
$20 \tan 30 = z$

11.54

$z = 11.5$

Solve the triangle. Communicate your solution carefully. Side: nearest tenth. Angle: nearest degree.

3)



$\angle X = 90^\circ \quad x = 19.9$

$\angle Y = 17^\circ \quad y = 5.0$

$\angle Z = 73^\circ \quad z = 19$

$180 - (90+17)$

$= 73$

$\cos 17^\circ = \frac{A}{H}$

$\frac{\cos 17^\circ}{1} = \frac{19}{x}$

$\frac{x \cos 17^\circ}{\cos 17} = \frac{19}{\cos 17} \quad x = 19.9$

Infinite Algebra 1

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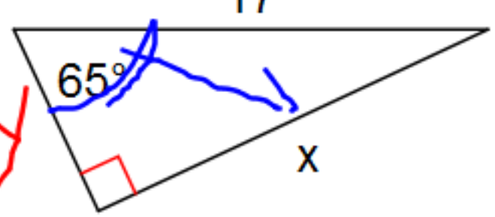
Solve the triangle. Communicate your solution carefully. Side: nearest tenth. Angle: nearest degree.

$\angle X = 65^\circ \quad x = 15.4$

$\angle Y = 25^\circ \quad y = 7.2$

$\angle Z = 90^\circ \quad z = 17$

4)



$180 - (65 + 90) = 25$

$\sin 65^\circ = \frac{O}{H}$

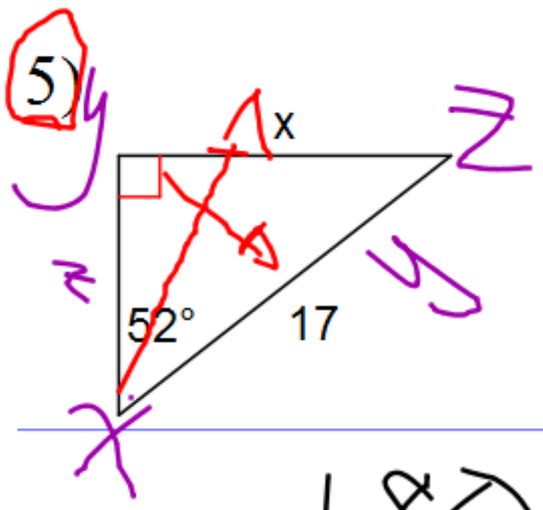
$\frac{\sin 65}{1} = \frac{x}{17}$

$17 \sin 65 = x$

$x = 15.4$

Solve the triangle. Communicate your solution carefully. Side: nearest tenth. Angle: nearest degree.

5)



$\angle X = 52^\circ$ $x = 13.4$

$\angle Y = 90^\circ$ $y = 17$

$\angle Z = 38^\circ$ $z = 10.5$

$180 - (90 + 52)$

38

$\sin 52^\circ = \frac{x}{17}$

$17 \sin 52^\circ = x$

$x = 13.4$

$a^2 + b^2 = c^2$

$z^2 + 13.4^2 = 17^2$

$-179.56 \quad -179.56$

$z^2 + 179.56 = 289$

$z^2 = 289 - 179.56$

$z^2 = 109.44$

$z = 10.5$