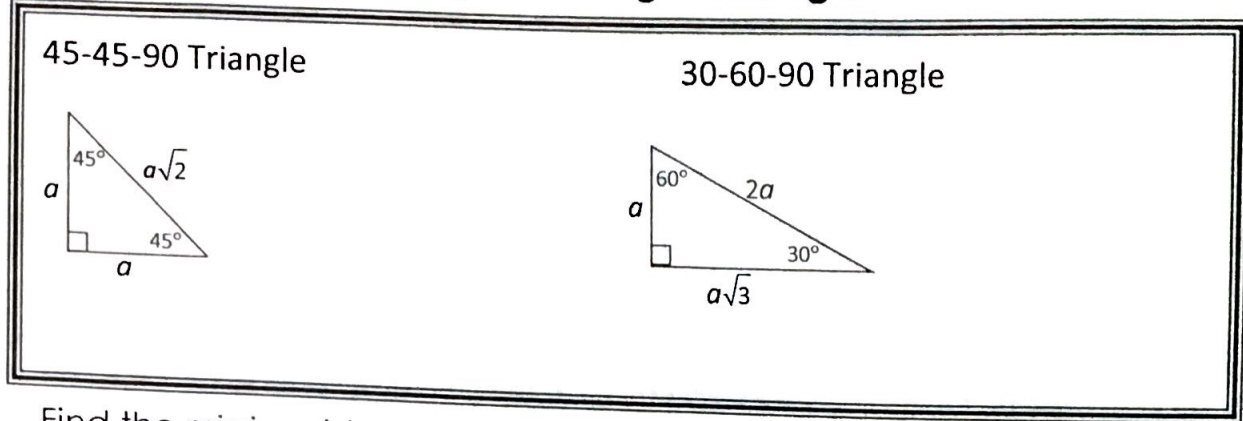
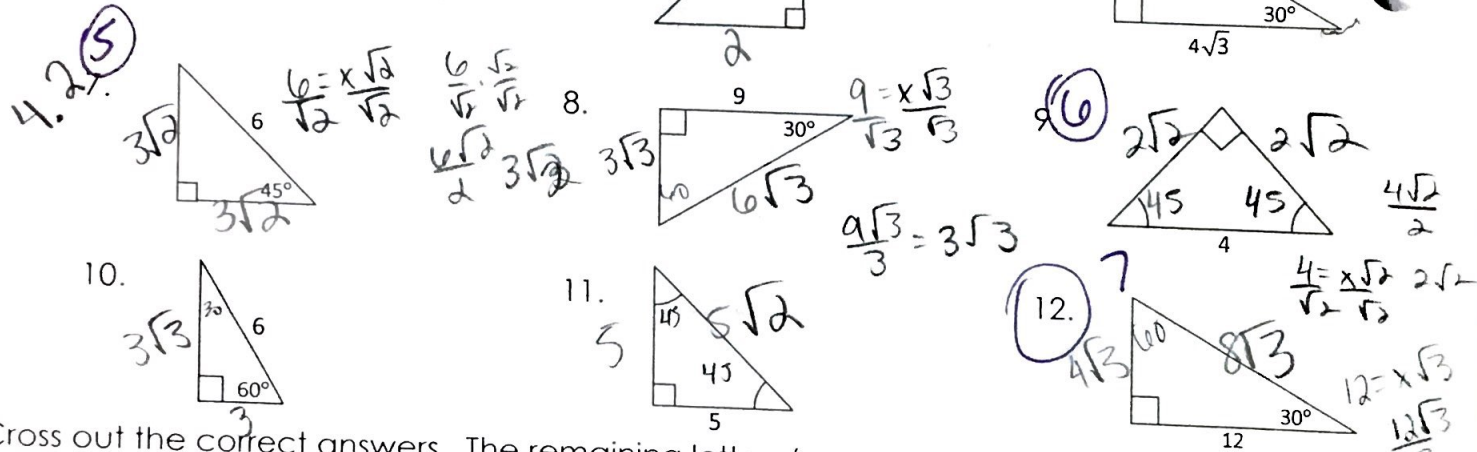
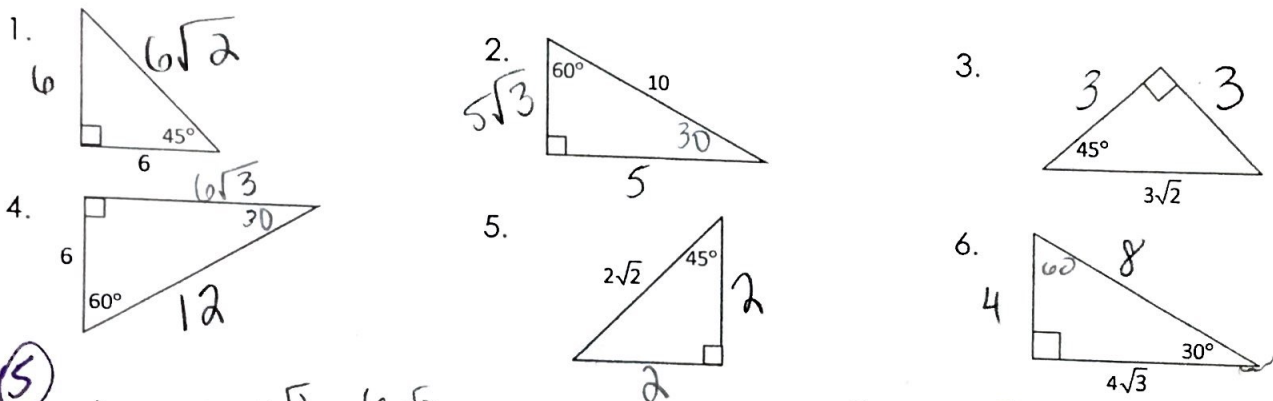


Special Right Triangles



Find the missing sides.



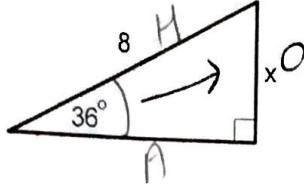
Cross out the correct answers. The remaining letters (one per space) complete the statement.

5	9	6√2	3	10	3√2	3	4√3	3√2	12	2√2
EQ	HA	UA	LT	LF	OT	HE	SQ	UA	RE	RO
6√3	5√3	25	3√3	6√3	5	20	3	3√3	36	2
OT	OF	TH	ER	AD	IU	EH	SO	FT	YP	PY
11	4	16	6	8	32	5√2	2	7	8√3	2√2
OT	TH	EN	AG	OR	US	AS	TH	E.	T.	S.

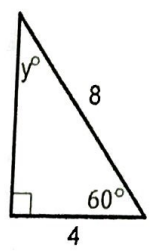
In a 30-60-90 degrees right triangle, the side opposite the 30-degree angle is

For each of the following, write the equation to find the missing value. Then rewrite the equation that you will enter in your calculator. Round your final answer to the nearest tenth.


1.
 $x \approx \underline{4.7}$
 $\sin(36) = \frac{x}{8}$
 $8 \sin(36)$



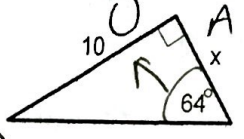
2. $180 - 60 - 90$
 $x \approx \underline{4\sqrt{3}}$
 $y = \underline{30}$



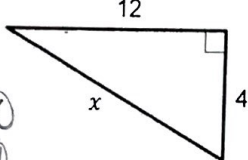
3.
 $y \approx \underline{7.8}$
 $\sin(40) = \frac{5}{y}$
 $\frac{y \sin(40)}{\sin(40)} = \frac{5}{\sin(40)}$
 $y = \frac{5}{\sin(40)}$



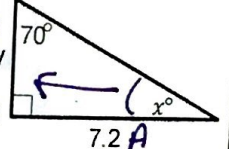
4.
 $x \approx \underline{4.9}$
 $\tan(64) = \frac{10}{A}$
 $A = \frac{10}{\tan(64)}$



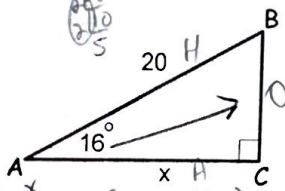
5.
 $x \approx \underline{4\sqrt{10}}$
 $144 + 16 = 160$
 $\sqrt{160} = 2\sqrt{10}$



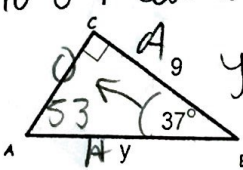
6.
 $x = \underline{20}$
 $y \approx \underline{2.6}$
 $7.2 \tan(20) = x = y = 2.6$



7.
 $x \approx \underline{19.2}$
 $m\angle B = \underline{\quad}$
 $\cos(16) = \frac{x}{20}$
 $20 \cos(16)$

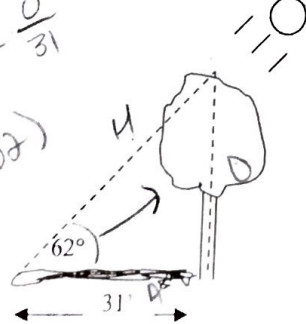


8.
 $y \approx \underline{11.3}$
 $m\angle A = \underline{53}$
 $180 - 90 - 37$
 $\cos(37) = \frac{9}{y}$
 $y = \frac{9}{\cos(37)}$



9. How tall is the tree?

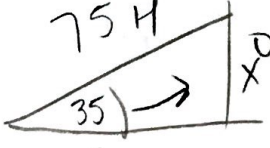
$\tan(62) = \frac{h}{31}$
 $31 \tan(62)$



58.3 feet

10. A man is flying a kite. The kite string is 75 feet long. If the angle that the kite string makes with the line horizontal to the ground is 35°, how far above the ground is the kite?

$\sin(35) = \frac{x}{75}$



43.0 feet