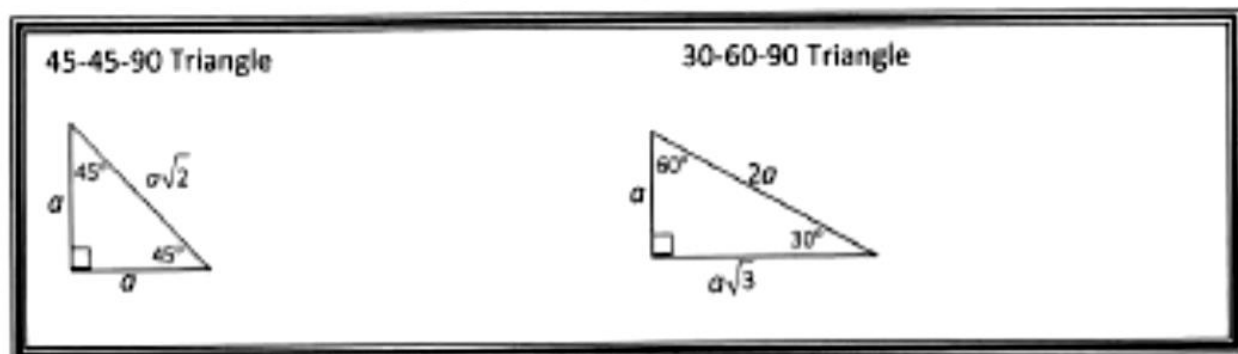
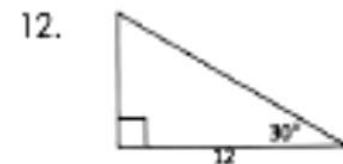
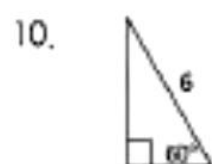
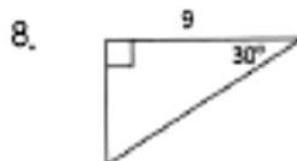
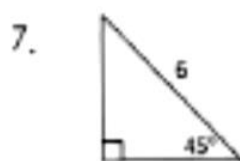
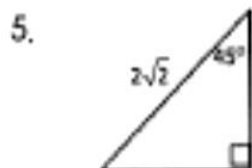
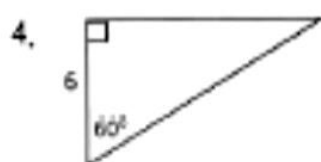
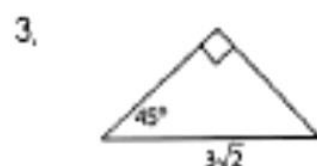
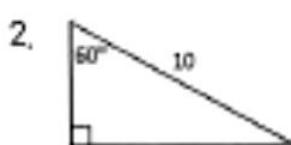


Special Right Triangles



Find the missing sides.

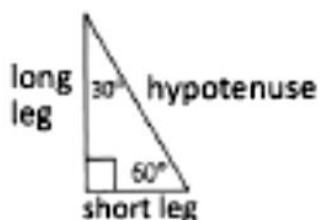


Cross out the correct answers. The remaining letters (one per space) complete the statement.

5	9	$6\sqrt{2}$	3	10	$3\sqrt{2}$	3	$4\sqrt{3}$	$3\sqrt{2}$	12	$2\sqrt{2}$
EQ	HA	UA	LT	LF	OT	HE	SQ	UA	RE	RO
$6\sqrt{3}$	$5\sqrt{3}$	25	$3\sqrt{3}$	$6\sqrt{3}$	5	20	3	$3\sqrt{3}$	36	2
OT	OF	TH	ER	AD	IU	EH	SO	FT	YP	PY
11	4	16	6	8	32	$5\sqrt{2}$	2	7	$8\sqrt{3}$	$2\sqrt{2}$
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

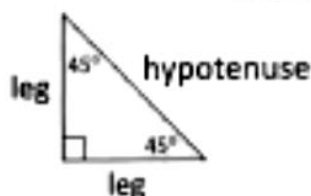
Special Right Triangles



$$\text{short leg} = \frac{1}{2} \cdot \text{hypotenuse}$$

$$\text{long leg} = \sqrt{3} \cdot (\text{short leg})$$

$$\text{hypotenuse} = 2 \cdot (\text{short leg})$$

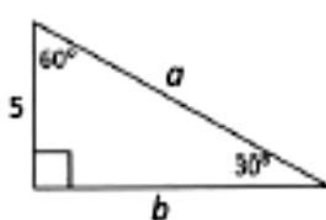


legs are equal

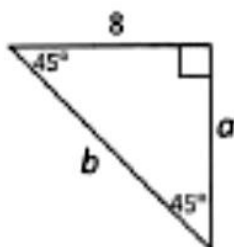
$$\text{hypotenuse} = \sqrt{2} \cdot (\text{leg})$$

Use the 30-60-90 and 45-45-90 triangle relationships to solve for the missing sides. Use the answers to reveal the name of the team that Abraham M. Saperstein established and sent on the road in 1927.

1



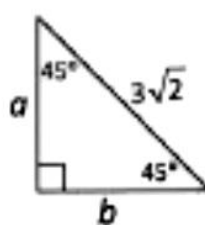
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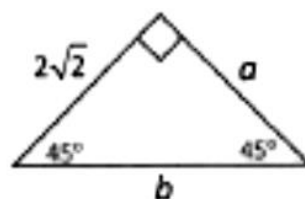
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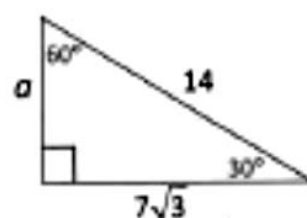
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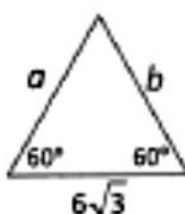
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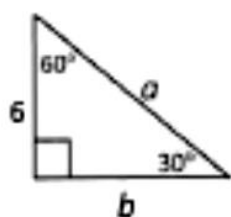
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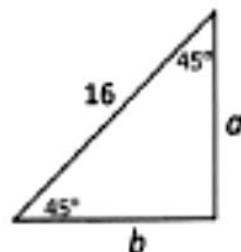
7



8



9



8	$2\sqrt{2}$	3	6	$5\sqrt{3}$	4	7	12	$8\sqrt{2}$	10	$6\sqrt{3}$
A	B	E	G	H	L	M	O	R	S	T

$\frac{8b}{3a}$ $\frac{1b}{5b}$ $\frac{4a}{8a}$ $\frac{1b}{7b}$ $\frac{2a}{8a}$ $\frac{9b}{7b}$ $\frac{5b}{3b}$ $\frac{4b}{4b}$ $\frac{6a}{9a}$

$\frac{3a}{5b}$ $\frac{8a}{5a}$ $\frac{4a}{7a}$ $\frac{7a}{2b}$ $\frac{8a}{7b}$ $\frac{7b}{3b}$ $\frac{4b}{9a}$ $\frac{1a}{1a}$