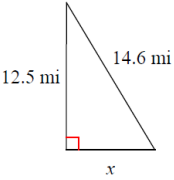


29)



$$12.5^2 + x^2 = 14.6^2$$


$$156.25 + x^2 = 213.16$$

$$\begin{array}{r} -156.25 \\ \hline x^2 = 56.91 \end{array}$$

$$x = 7.5$$

Jan 4-8:05 AM

30)

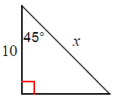


$$n = \frac{2\sqrt{2}}{\sqrt{2}}$$

$$n = 2 \quad m = 2$$

Jan 4-8:05 AM

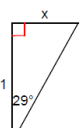
31)



$$y = 10 \quad x = 10\sqrt{2}$$

Jan 4-8:05 AM

32)



$$11 \cdot \tan 29 = \frac{x}{1} \cdot 1$$

$$11 \cdot \tan 29 = x$$

$$6.1 = x$$

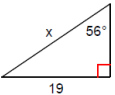
$$\sin \theta = \frac{o}{h}$$

$$\cos \theta = \frac{a}{h}$$

$$\tan \theta = \frac{o}{a}$$

Jan 4-8:05 AM

33)



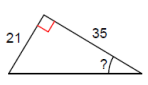
$$x \cdot \sin 56 = \frac{19}{x} \cdot x$$

$$x \cdot \frac{\sin 56}{\sin 56} = \frac{19}{\sin 56}$$

$$x = 22.9$$

Jan 4-8:06 AM

34)

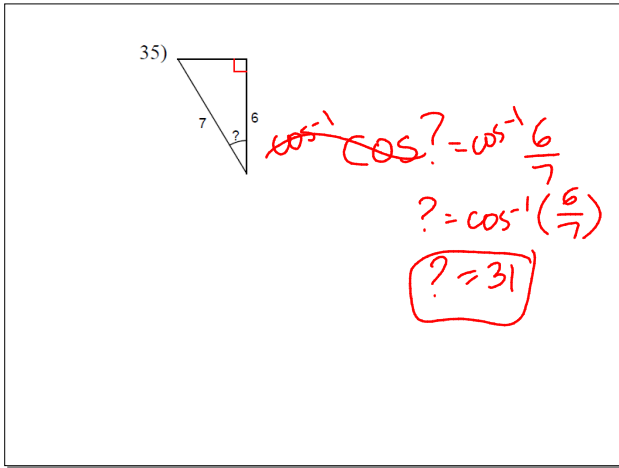


$$\tan^{-1} \left(\frac{21}{35} \right)$$

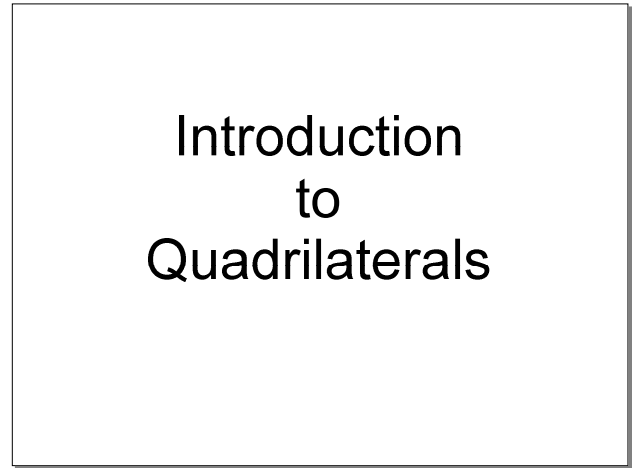
$$? = \tan^{-1} \left(\frac{21}{35} \right)$$

$$? = 31$$

Jan 4-8:06 AM



Jan 4-8:06 AM



Jan 4-8:06 AM

A quadrilateral is a four-sided polygon with four angles. The sum of the interior angles of a quadrilateral is 360° .

Parallelogram Rectangle Rhombus Square Trapezoid (US) / Trapezium (UK) Kite

Jan 4-8:06 AM

A **rectangle** is a four-sided shape where every angle is a right angle (90°).

Also opposite sides are parallel and of equal length.

Jan 4-8:11 AM

A **rhombus** is a four-sided shape where all sides have equal length.

Also opposite sides are parallel and opposite angles are equal.

The diagonals (dashed lines in second figure) of a rhombus bisect each other at right angles.

Jan 4-8:12 AM

A **square** has equal sides and every angle is a right angle (90°).

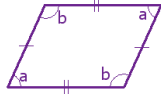
Also opposite sides are parallel.

A square also fits the definition of a rectangle (all angles are 90°), and a rhombus (all sides are equal length).

Jan 4-8:13 AM

In a **parallelogram**, opposite sides are parallel and equal in length, and opposite angles are equal (angles "a" are the same, and angles "b" are the same).

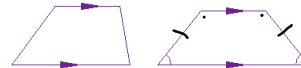
A square, a rectangle, and a rhombus are each also a parallelogram.



Jan 4-8:14 AM

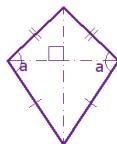
A **trapezoid** has one pair of opposite sides parallel.

It is called an **isosceles trapezoid** if the sides that aren't parallel are equal in length and both angles coming from a parallel side are equal, as shown.

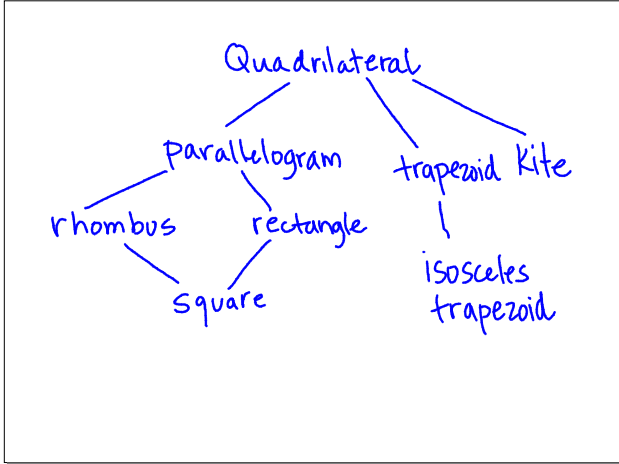


Jan 4-8:16 AM

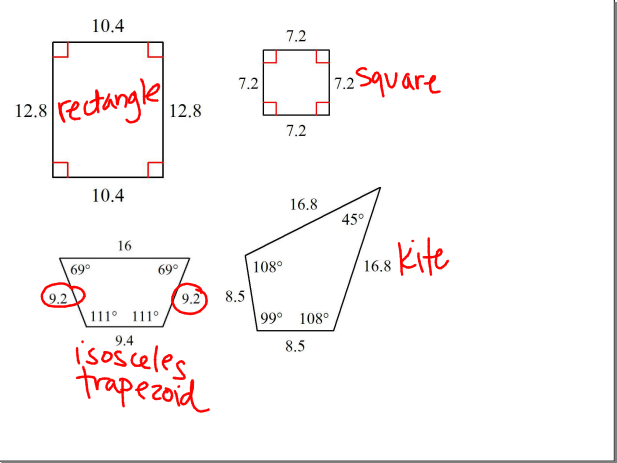
A **kite** has two pairs of sides. Each pair is made up of adjacent sides that are equal in length. The angles are equal where the pairs meet. Diagonals (dashed lines) meet at a right angle, and one of the diagonal bisects (cuts equally in half) the other.



Jan 4-8:17 AM



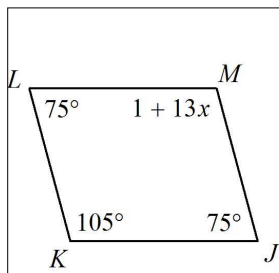
Jan 5-2:20 PM



Jan 4-8:25 AM

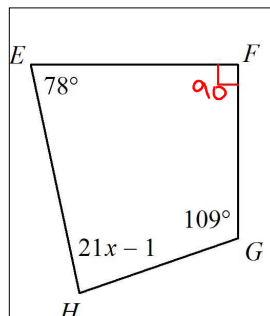
To find a missing angle in a quadrilateral, recall that all the angles must add to be 360°.

Jan 4-8:18 AM



$75 + 75 + 105 + 1 + 13x = 360$
 $13x + 256 = 360$
 $-256 \quad -256$
 $\frac{13x}{13} = \frac{104}{13}$
 $x = 8$

Jan 4-8:27 AM



$90 + 78 + 109 + 21x - 1 = 360$
 $21x + 276 = 360$
 $-276 \quad -276$
 $\frac{21x}{21} = \frac{84}{21}$
 $x = 4$

Jan 4-8:28 AM