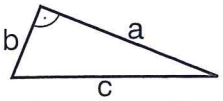
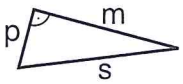
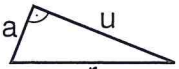
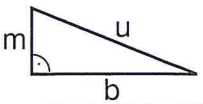
Testaufgaben (1)

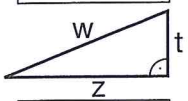
1. Notiere unter jedem Dreieck die Gleichung nach dem *Satz des Pythagoras.*

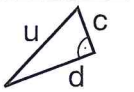
a) 

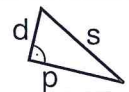
b) 

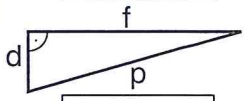
c) 

d) 

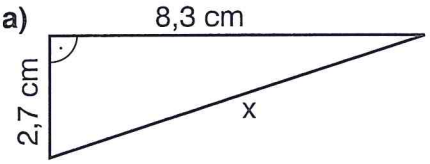
e) 

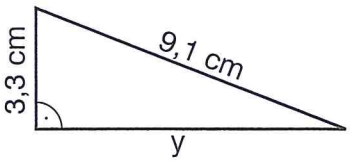
f) 

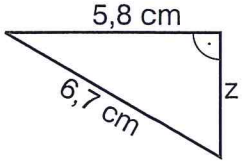
g) 

h) 

2. Berechne die gesuchte Strecke.

a) 

b) 

c) 

3. Berechne die fehlende Seitenlänge des Dreiecks, wenn

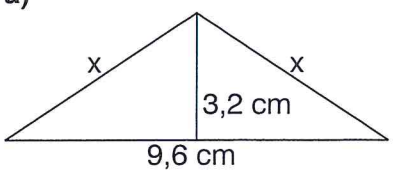
a) $\gamma = 90°$; $a = 2{,}8$ cm; $c = 7{,}5$ cm

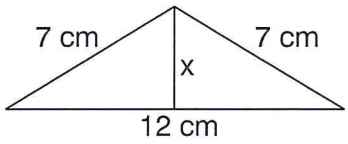
b) $\gamma = 90°$; $b = 5{,}6$ cm; $c = 6{,}5$ cm

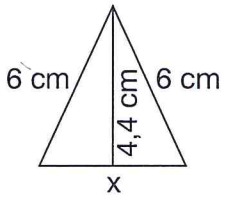
c) $\beta = 90°$; $c = 6{,}3$ cm; $b = 12{,}5$ cm

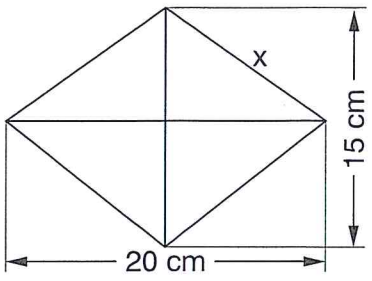
d) $\alpha = 90°$; $a = 9{,}5$ cm; $b = 3{,}6$ cm

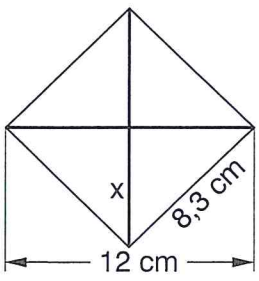
4. Berechne die Streckenlänge x.

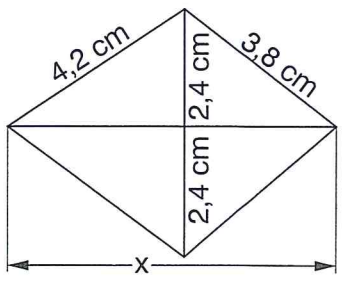
a) 

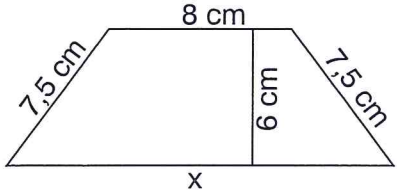
b) 

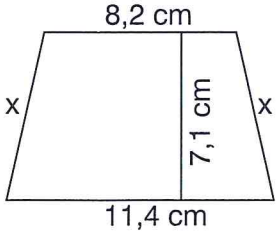
c) 

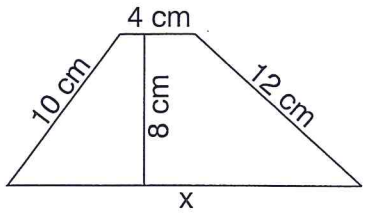
5. **a)** 

b) 

c) 

6. **a)** 

b) 

c) 

Kommentare und Lösungen zu den Testaufgaben

Testaufgaben (1)

1. **a)** $a^2 + b^2 = c^2$ **b)** $m^2 + p^2 = s^2$ **c)** $a^2 + u^2 = r^2$ **d)** $b^2 + m^2 = k^2$
e) $t^2 + z^2 = w^2$ **f)** $c^2 + d^2 = u^2$ **g)** $d^2 + p^2 = s^2$ **h)** $f^2 + d^2 = p^2$

2. **a)** x = 8,728 cm **b)** y = 8,481 cm **c)** z = 3,354 cm

3. **a)** b = 6,96 cm **b)** a = 3,3 cm **c)** a = 10,79 cm **d)** c = 8,79 cm

4. **a)** x = 5,77 cm **b)** x = 3,61 cm **c)** x = 8,16 cm

5. **a)** x = 12,5 cm **b)** x = 5,73 cm **c)** x = 6,4 cm

6. **a)** x = 17 cm **b)** x = 7,28 cm **c)** x = 18,94 cm

Testaufgaben (2)

1. e = 12,02 cm **2.** a = 3,25 cm u = 13 cm A = 10,56 cm²

3. e = 10,46 cm **4.** b = 7,75 cm u = 27,5 cm A = 46,5 cm²

5. h = 4,33 cm **6.** h = 4,76 cm; A = 78,54 cm² **7.** a = 2,31 cm; V = 12,32 cm³

8. **a)** 6,32 cm 5,36 cm 3,83 cm **b)** 6,45 cm

9. 442,1 m muss das Seil mindestens lang sein (genau: 442,04...).

10. 66,14 m ist der Drachen hoch.

11. 9,8 m entfernt schlägt die Spitze auf den Erdboden.

12. 12,69 m war die Fichte hoch.

13. 18,06 m ist das Gewässer an der Verankerung tief.