Key

# PROPERTIES OF SQUARES AND RHOMBI HOMEWORK

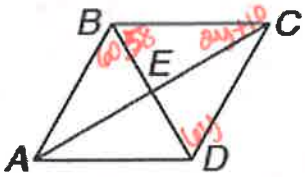
**Use rhombus ABCD to answer the following questions.**

If m∠ABD = 60, find m∠BDC.

60

2. If AE = 8, find AC.

16




3. Find m∠CEB.

90

4. If m∠CBD = 58, find m∠ACB.

32

5. If AE = 3x − 1 and AC = 16, find x. $2(3x-1) = 16$

$6x - 2 = 16$

$6x = 18$

$x = 3$

6. If m∠CDB = 6y and m∠ACB = 2y + 10, find y.

$6y + 2y + 10 = 90$

$8y + 10 = 90$

$8y = 80$

$y = 10$

*If AD = 2x + 4 and CD = 4x − 4, find x.*

$2x + 4 = 4x - 4$

$8 = 2x$

$x = 4$

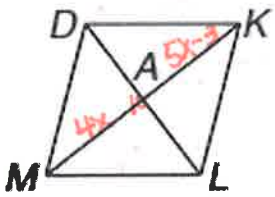
**Use rhombus DKLM with AM = 4x, AK = 5x – 3, and DL = 10.**

8. Find x.

$4x = 5x - 3$

$-x = -3$

$x = 3$




9. Find AL.

5

10. Find m∠KAL.

90°

# PROPERTIES OF SQUARES AND RHOMBI HOMEWORK

**Use rhombus QRST to complete each problem.**

1. If QS = x – 4 and QU = 39, find x.

$x-4 = 2(39)$

$x - 4 = 78$

$x = 82$

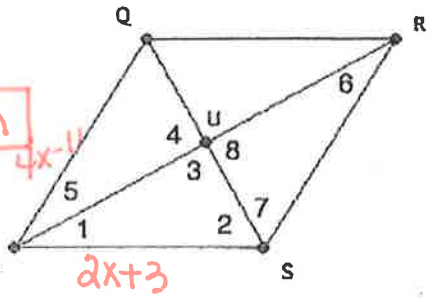
2. If ST = 2x + 3 and TQ = 4x – 11, find TQ.

$2x+3 = 4x-11$

$14 = 2x$

$x = 7$

$4(7) - 11 = 17$




3. If m∠1=33 and m∠5=7x, find x.

$33 = 7x$

$x = \frac{33}{7}$

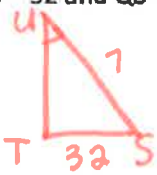
4. If m∠8=0.5x+52, find x.

$0.5x + 52 = 90$

$0.5x = 38$

$x = 76$

5. If TS = 32 and QS = 14, find TU.




$7^2 + TU^2 = 32^2$

$TU = 31.22$

**Use square ABCD to complete each problem.**

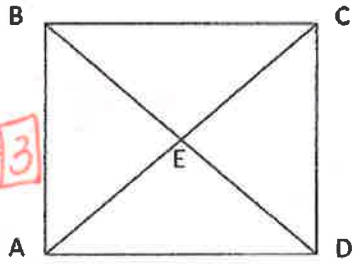
6. If AC = 2x + 9 and BD = 4x + 15, find BD.

$2x+9 = 4x+15$

$-6 = 2x$

$x = -3$

$4(-3) + 15 = 3$




7. If m∠BAE=8x+13, find x.

$8x + 13 = 45$

$8x = 32$

$x = 4$

8. If BE = 17 and CE = 4x + 9, find x.

$17 = 4x+9$

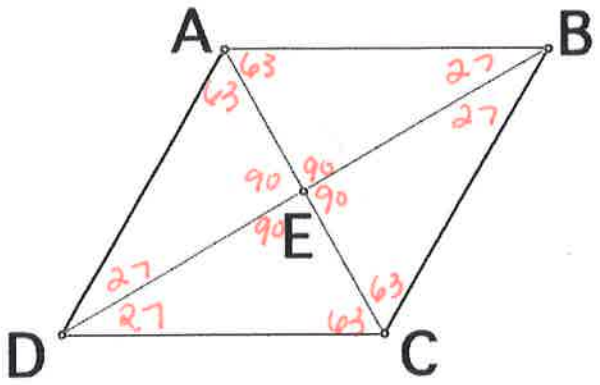
$8 = 4x$

$x = 2$

# PROPERTIES OF SQUARES AND RHOMBI HOMEWORK

Find the missing measurements of Rhombus ABCD.

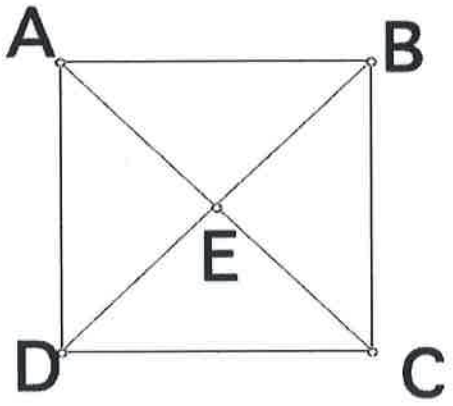
AB = 10
BC = 10
CD = 10
DA = 10
AC = 9
DB = 18
AE = 4.5
BE = 9
CE = 4.5
DE = 9




m<ABE = 27 m<EBC = 27 m<BCE = 63 m<ECD = 63
m<CDE = 27 m<EDA = 27 m<DAE = 63 m<EAB = 63 °
m<AEB = 90 m<BEC = 90 m<CED = 90 m<DEA = 90

Find the missing measurements of Square ABCD.

AB = 12 BC = 12
CD = 12 DA = 12
AC = 18 DB = 18
AE = 9 BE = 9
CE = 9 DE = 9




m<ABE = 45 m<EBC = 45 m<BCE = 45 m<ECD = 45
m<CDE = 45 m<EDA = 45 m<DAE = 45 m<EAB = 45
m<AEB = 90 m<BEC = 90 m<CED = 90 m<DEA = 90