EduSahara™ Learning Center Assignment

Grade : Class VII, CBSE
Chapter : Simple Equations
Name : Simple Equation Word Problems
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1. Two angles of a triangle measure 55° and 57° respectively. Find the measure of the third angle of the triangle

(i) 69° (ii) 68° (iii) 70° (iv) 67° (v) 66°

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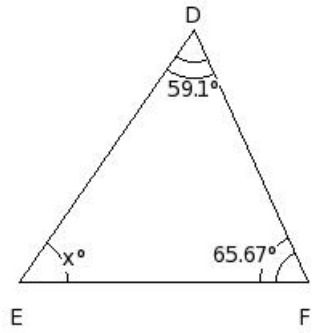
2. Find the unknown angle from the following figure



(i) x = 56.23° (ii) x = 53.23° (iii) x = 54.23° (iv) x = 55.23° (v) x = 57.23°

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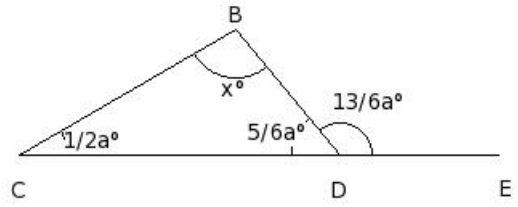
3. In the given figure, △BCD in which side CD has been produced to E. If ∠DBC = x° , ∠BCD = (1/2a)° , ∠CDB = (5/6a)° and ∠BDE = (13/6a)°, find the values of a and x.



(i) a = 59° , x = 99°

(ii) a = 60° , x = 100°

(iii) a = 62° , x = 102°

(iv) a = 61° , x = 101°

(v) a = 58° , x = 98°

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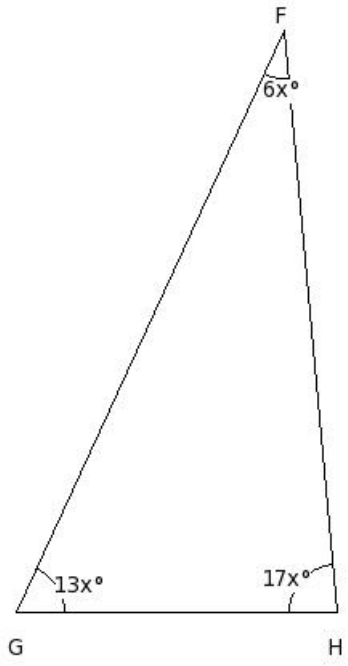
4. Find the angles of the triangle



(i) F = 32° , G = 65° , H = 83°

(ii) F = 30° , G = 63° , H = 87°

(iii) F = 30° , G = 65° , H = 85°

(iv) F = 28° , G = 65° , H = 87°

(v) F = 28° , G = 67° , H = 85°

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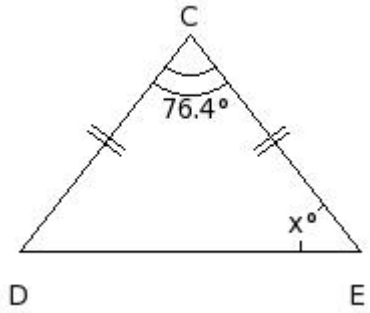
5. Calculate the value of x in the following figure



(i) x = 52.8° (ii) x = 49.8° (iii) x = 53.8°

(iv) x = 50.8° (v) x = 51.8°

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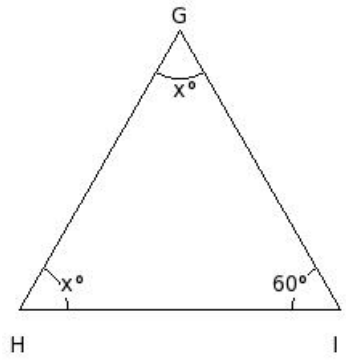
6. Find the unknown angles in the following figure



(i) G = 60°, H = 60°

(ii) G = 61°, H = 61°

(iii) G = 59°, H = 59°

(iv) G = 58°, H = 58°

(v) G = 62°, H = 62°

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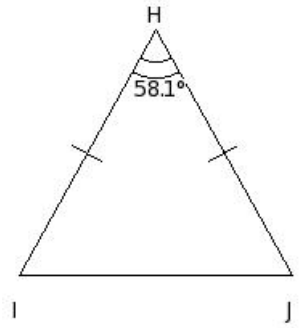
7. In the given triangle, ∠H = 58.1°. Find the measure of ∠I and ∠J



(i) ∠I = ∠J = 60.95°

(ii) ∠I = ∠J = 61.95°

(iii) ∠I = ∠J = 62.95°

(iv) ∠I = ∠J = 58.95°

(v) ∠I = ∠J = 59.95°

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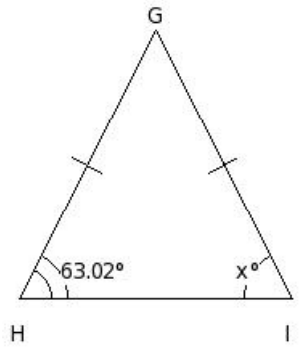
8. Find the unknown angle in the following figure



(i) x = 61.02° (ii) x = 62.02° (iii) x = 65.02°

(iv) x = 63.02° (v) x = 64.02°

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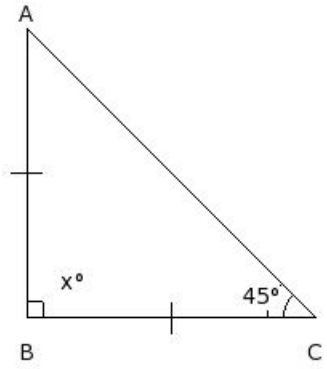
9. Find the unknown angle in the following figure



(i) x = 89° (ii) x = 92° (iii) x = 90°

(iv) x = 91° (v) x = 88°

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10. In △GHI, if ∠G = 68° and ∠H = 63°, find the measure of ∠I

(i) I = 47° (ii) I = 51° (iii) I = 48° (iv) I = 49° (v) I = 50°

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11. In △HIJ, if ∠H = 90° and ∠I = ∠J, find the measure of each of the equal angles of the triangle

(i) 45° (ii) 46° (iii) 47° (iv) 43° (v) 44°

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12. One of the two equal angles of an isosceles triangle measures 48°. Find the measure of each angle of the triangle.

(i) A = 46°, B = 48°, C = 86°

(ii) A = 50°, B = 48°, C = 82°

(iii) A = 48°, B = 48°, C = 84°

(iv) A = 48°, B = 46°, C = 86°

(v) A = 46°, B = 50°, C = 84°

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13. Find the measure of each of the two equal angles of an isosceles right-angled triangle.

(i) 43° (ii) 47° (iii) 46° (iv) 44° (v) 45°

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14. If all the three angles of a triangle are of the same measure, find the measure of each of the angles.

(i) 60° (ii) 59° (iii) 58° (iv) 61° (v) 62°

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15. In a right-angled triangle if one of the acute angles is 29°, find the measure of the other acute

angle.

(i) 62° (ii) 63° (iii) 60° (iv) 61° (v) 59°

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16. The vertical angle of an isosceles triangle is twice the sum of its base angles. Find each angle of the triangle.

(i) A = 120°, B = 30°, C = 30°

(ii) A = 118°, B = 32°, C = 30°

(iii) A = 118°, B = 30°, C = 32°

(iv) A = 120°, B = 28°, C = 32°

(v) A = 122°, B = 30°, C = 28°

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17. In an isosceles triangle, each base angle is four times its vertical angle. Find each angle of the triangle.

(i) A = 18°, B = 80°, C = 82°

(ii) A = 20°, B = 78°, C = 82°

(iii) A = 18°, B = 82°, C = 80°

(iv) A = 20°, B = 80°, C = 80°

(v) A = 22°, B = 80°, C = 78°

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18. The ratio between the base angle and the vertical angle of an isosceles triangle is 1 : 1. Find each angle of the triangle

(i) A = 58°, B = 60°, C = 62°

(ii) A = 58°, B = 62°, C = 60°

(iii) A = 60°, B = 58°, C = 62°

(iv) A = 60°, B = 60°, C = 60°

(v) A = 62°, B = 60°, C = 58°

Assignment Key

1) (ii)
2) (iv)
3) (ii)
4) (iii)
5) (v)
6) (i)
7) (i)
8) (iv)
9) (iii)
10) (iv)
11) (i)
12) (iii)
13) (v)
14) (i)
15) (iv)
16) (i)
17) (iv)
18) (iv)