Triangle from three sides - answers

Worked answers / Keep separate from the student sheet.

1. A triangle has sides 18, 24 and 30 mm. Check the triangle inequality; find its area.

18+24>30; other inequalities also hold. Right triangle: area = 18 x 24/2 = 216 mm^2.

2. A triangle has sides 21, 28 and 35 mm. Check the triangle inequality; find its area.

21+28>35; other inequalities also hold. Right triangle: area = 21 x 28/2 = 294 mm^2.

3. A triangle has sides 24, 32 and 40 mm. Check the triangle inequality; find its area.

24+32>40; other inequalities also hold. Right triangle: area = 24 x 32/2 = 384 mm^2.

4. A triangle has sides 27, 36 and 45 mm. Check the triangle inequality; find its area.

27+36>45; other inequalities also hold. Right triangle: area = 27 x 36/2 = 486 mm^2.

5. A triangle has sides 30, 40 and 50 mm. Check the triangle inequality; find its area.

30+40>50; other inequalities also hold. Right triangle: area = 30 x 40/2 = 600 mm^2.

6. A triangle has sides 33, 44 and 55 mm. Check the triangle inequality; find its area.

33+44>55; other inequalities also hold. Right triangle: area = 33 x 44/2 = 726 mm^2.

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