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I. $a = 120^{\circ}, b = 60^{\circ}$

2. $a = 150^{\circ}, b = 150^{\circ}$

3. $a = 85^{\circ}$, $b = 95^{\circ}$

4. a = 135°, b = 45°, c = 135°

5. $a = 80^{\circ}$

6. $a = 45^{\circ}$

7. $a = 100^{\circ}$

8. $a = 70^{\circ}$

Think. 25° and 35°

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I. $a = 75^{\circ}$, $b = 105^{\circ}$, $c = 75^{\circ}$

2. $\alpha = 130^{\circ}, b = 50^{\circ}, c = 130^{\circ}$

 a = 95°, b = 55°, c = 30°, d = 95°

4. a = 50°, b = 40°, c = 90°, d = 50°

5. a = 25°

6. $a = 30^{\circ}$

7. $a = 90^{\circ}$

8. $a = 70^{\circ}$

q. Triangle I: a = 70°, b = II0° The missing angle (b) is the sum of the two given angles in the triangle.

Triangle 2: $a = 30^{\circ}$, $b = 150^{\circ}$ The missing angle (b) is the sum of the two given angles in the triangle.

Own Triangle: answers will vary.

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I. $a = 83^{\circ}, b = 83^{\circ}, c = 97^{\circ}$

2. a = 53°, b = 127°, c = 53°

3. a = II3°, b = 41°, c = 26°, d = II3°

4. a = 55°, b = 81°, c = 44°, d = 55°

5. $\alpha = 30^{\circ}$

6. a = 15°

7. $q = 97^{\circ}$

8. $a = 43^{\circ}$

9. Triangle I: a = 45°, b = 135° The exterior angle (b) is the sum of the two given angles in the triangle.

Triangle 2: $a = 34^{\circ}$, $b = 146^{\circ}$ The exterior angle (b) is the sum of the two given angles in the triangle.

Own triangle: answers will vary.

Extra Challenge Questions

Task 40: Missing angles:

Angle $a = 75^{\circ}$

Task 41: Isosceles

triangle angles: Angle e

= 286°

Task 42: Clock hands angles:

75°