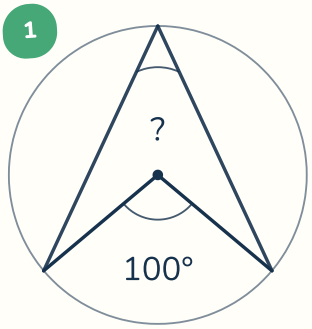
Inscribed angle — Center angle given

Name: _____ Date: _____

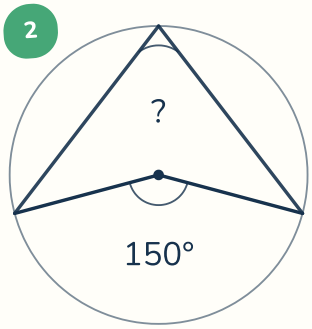
The angle at the center is given. Find the angle on the circle.

1



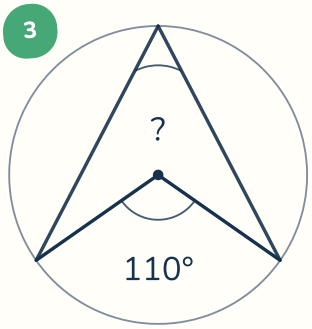
50 degrees

2



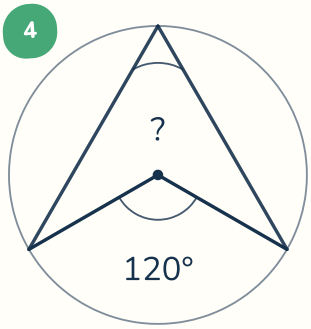
___ degrees

3



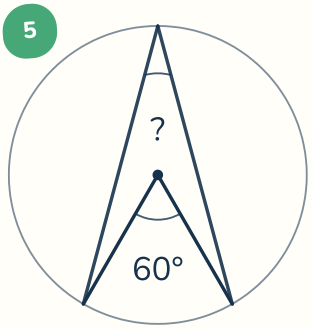
___ degrees

4



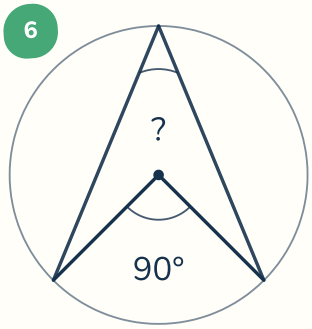
___ degrees

5



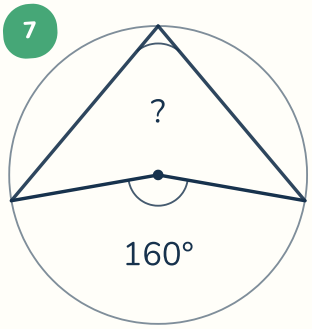
___ degrees

6



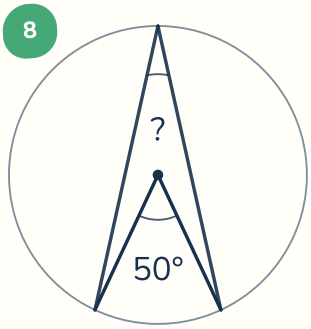
___ degrees

7



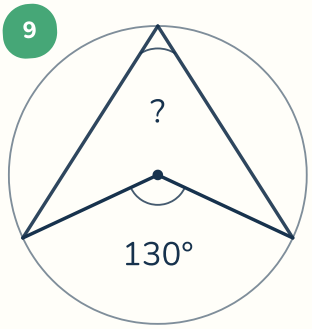
___ degrees

8



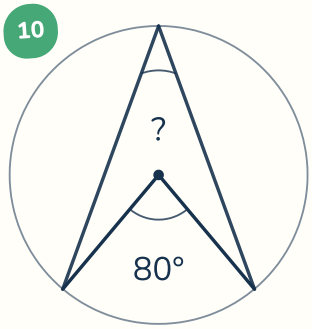
___ degrees

9



___ degrees

10



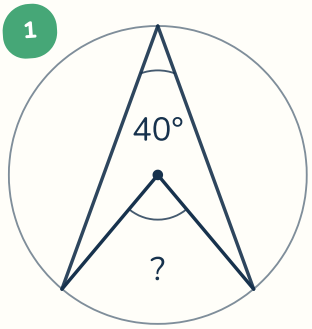
___ degrees

Inscribed angle — Circle angle given

Name: _____ Date: _____

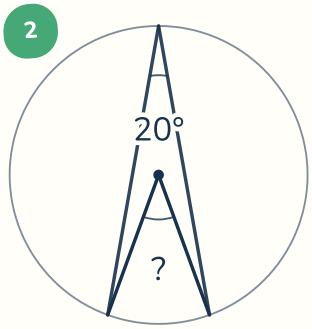
The angle on the circle is given. Find the angle at the center.

1



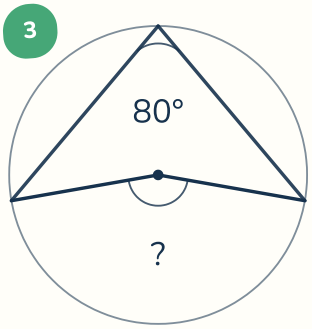
80 degrees

2



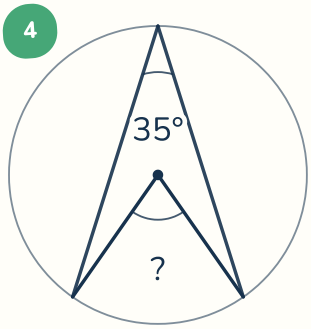
____ degrees

3



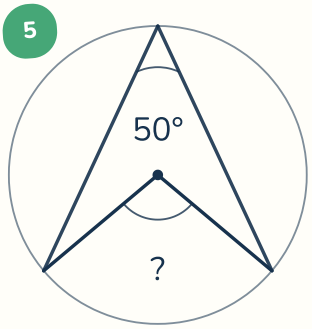
_____ degrees

4



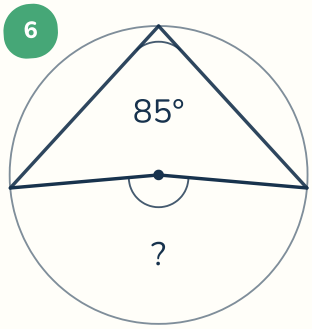
____ degrees

5



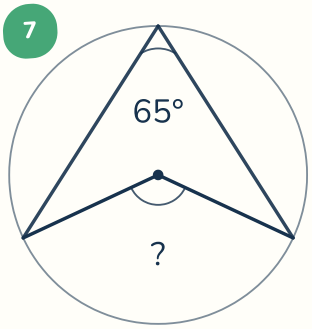
_____ degrees

6



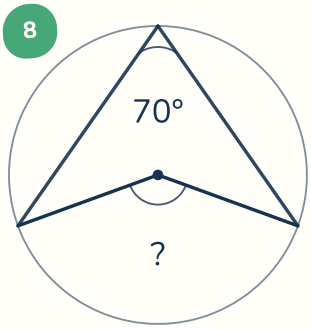
_____ degrees

7



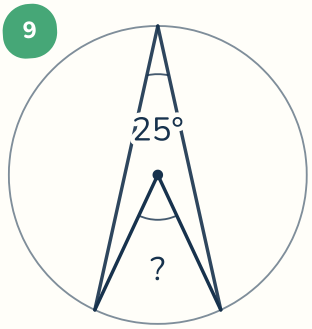
_____ degrees

8



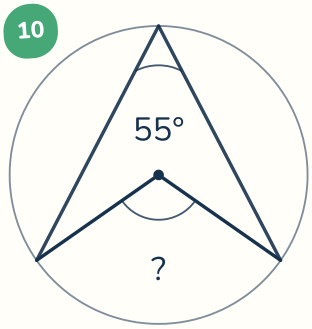
_____ degrees

9



____ degrees

10



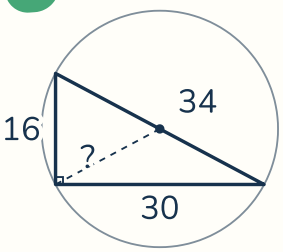
_____ degrees

Triangle circles — The circle through the corners

Name: _____ Date: _____

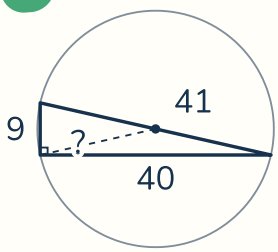
Each circle passes through all three corners. Find its radius.

1



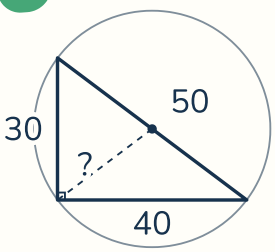
17 cm

2



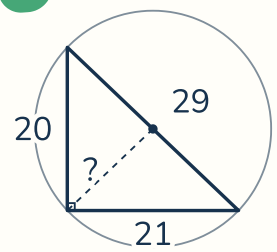
_____ cm

3



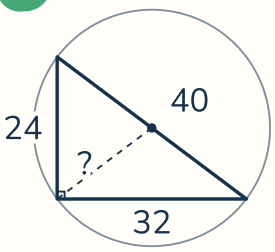
_____ cm

4



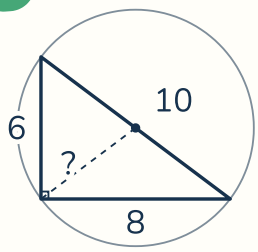
_____ cm

5



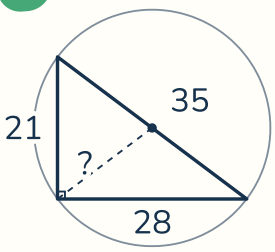
_____ cm

6



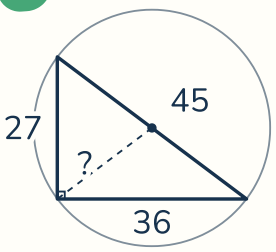
_____ cm

7



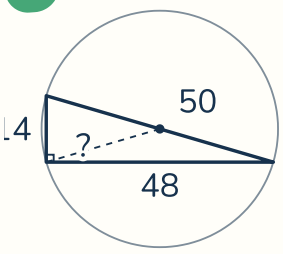
_____ cm

8



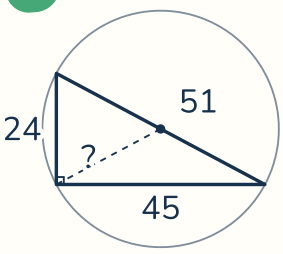
_____ cm

9



_____ cm

10



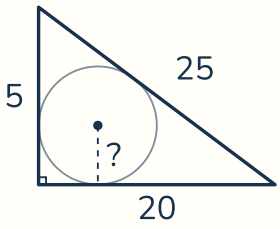
_____ cm

Triangle circles — The circle inside

Name: _____ Date: _____

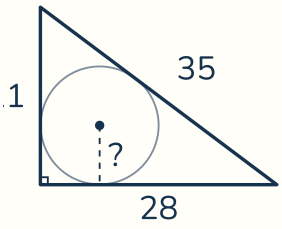
Each circle just touches all three sides. Find its radius.

1



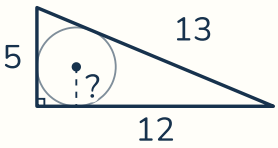
5 cm

2



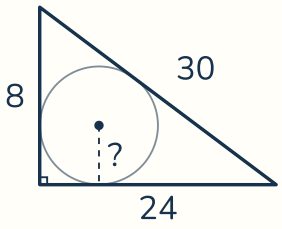
___ cm

3



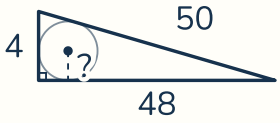
___ cm

4



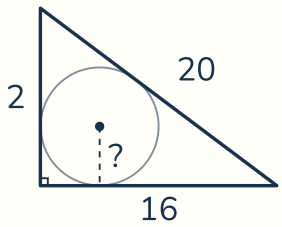
___ cm

5



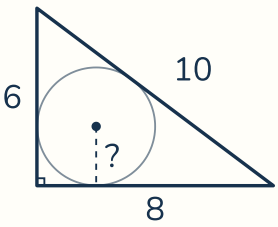
___ cm

6



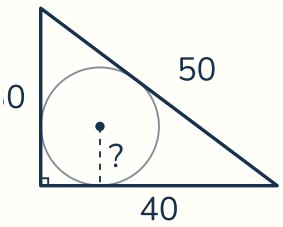
___ cm

7



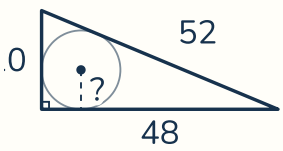
___ cm

8



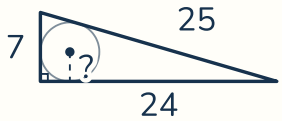
___ cm

9



___ cm

10



___ cm

Power Pack · Angles in circles — Answer key

The angle at the center

1. center 100° → circle 50°
2. center 150° → circle 75°
3. center 110° → circle 55°
4. center 120° → circle 60°
5. center 60° → circle 30°
6. center 90° → circle 45°
7. center 160° → circle 80°
8. center 50° → circle 25°
9. center 130° → circle 65°
10. center 80° → circle 40°

The angle on the circle

1. circle 40° → center 80°
2. circle 20° → center 40°
3. circle 80° → center 160°
4. circle 35° → center 70°
5. circle 50° → center 100°
6. circle 85° → center 170°
7. circle 65° → center 130°
8. circle 70° → center 140°
9. circle 25° → center 50°
10. circle 55° → center 110°

The circle through the corners

1. 16, 30, 34 — through the corners: 17 cm
2. 9, 40, 41 — through the corners: 20.5 cm
3. 30, 40, 50 — through the corners: 25 cm
4. 20, 21, 29 — through the corners: 14.5 cm
5. 24, 32, 40 — through the corners: 20 cm
6. 6, 8, 10 — through the corners: 5 cm
7. 21, 28, 35 — through the corners: 17.5 cm
8. 27, 36, 45 — through the corners: 22.5 cm
9. 14, 48, 50 — through the corners: 25 cm
10. 24, 45, 51 — through the corners: 25.5 cm

The circle inside

1. 15, 20, 25 — inside: 5 cm
2. 21, 28, 35 — inside: 7 cm
3. 5, 12, 13 — inside: 2 cm
4. 18, 24, 30 — inside: 6 cm
5. 14, 48, 50 — inside: 6 cm
6. 12, 16, 20 — inside: 4 cm
7. 6, 8, 10 — inside: 2 cm
8. 30, 40, 50 — inside: 10 cm
9. 20, 48, 52 — inside: 8 cm
10. 7, 24, 25 — inside: 3 cm