

## Worksheet: Exploring Some Geometric Themes

Telangana State Board · Class 8 · Mathematics · 5 questions · 13 marks

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_ / 13

**Q1.** Which criterion applies when two triangles have all three sides equal? *[1 mark]*

---

---

**Q2.** Find circumference of a circle with radius 14 cm ( $\pi = 22/7$ ). *[1 mark]*

---

---

**Q3.** Two triangles are similar with sides in ratio 3:5. Find the ratio of their (a) perimeters, (b) areas. *[3 marks]*

---

---

---

**Q4.** A wheel has diameter 70 cm. How many revolutions to cover 11 km? *[3 marks]*

---

---

---

**Q5.** A 6 m tall man casts a shadow of 3 m. At the same time, a building casts a shadow of 45 m. Using similar triangles, find the height of the building. *[5 marks]*

---

---

---