

NAME: _____

DATE: _____

1. What is the circumference of a circle with a diameter of 20.8 cm?

| DATA | EQUATIONS | MATH | ANSWER |
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2. What is the circumference of a circle with a radius of 20.8 cm?

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3. What is the angular velocity of a record player which makes 11 revolutions in 20 seconds?

| DATA | EQUATIONS | MATH | ANSWER |
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4. A cat is tied to a 0.35 m string and swung over your head.

A. How far does it travel in one revolution?

| DATA | EQUATIONS | MATH | ANSWER |
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B. If the cat makes 10 revolutions in 2.80 seconds, what is its angular velocity?

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C. What is its tangential velocity?

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D. What is the centripetal force acting on the cat?

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EXTRA CREDIT. What is the tangential velocity of a cat in orbit 63,800,000 m above the Earth if it completes one orbit every day?

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