

Part 3 Problems: Do these as fast as possible. Once you are done, raise your hand so the instructors can check your work. The person who finishes all 28 problems first and has all problems correct wins!

Estimate the Square Root of:

1. 62

2. 78

3. 134

4. 200

5. 365

6. 390

7. 402

8. 17

9. 98

10. 636

How many Digits are in the Answer of the Following:

1.  $667 \times 8,090$

2.  $3,456 \times 9,921,345$

3.  $382 \times 45,009$

4.  $129 \times 129$

5.  $329,875 \times 32,400$

6.  $6,789/15$

7.  $2,899,899/6,225$

8.  $100,000,009,876/62,500$

9.  $24,680/4,328$

10.  $999,999,999,998/999,999,990$

Which Value will be Greater (If it's impossible to tell with basic estimation, write "Unknown"):

1.  $\frac{11}{24} + \frac{490}{992}$  or  $\frac{228}{450} + \frac{113}{220}$

2.  $\frac{1313}{2550} - \frac{196}{397}$  or  $\frac{37}{77} - \frac{2340}{4407}$

3.  $\frac{9}{26} + \frac{428}{1609}$  or  $\frac{74}{310} + \frac{680}{2217}$

4.  $\frac{900}{1750} - \frac{480}{979}$  or  $\frac{395}{800} - \frac{18}{35}$

5.  $\frac{317}{666} \times \frac{111}{345}$  or  $\frac{26}{49} \times \frac{90}{265}$

6.  $\frac{20}{99} \times \frac{88}{121}$  or  $\frac{601}{798} \times \frac{110}{548}$

7.  $\frac{1720}{3389} / \frac{61}{188}$  or  $\frac{45}{93} / \frac{889}{2610}$

8.  $\frac{56}{159} + \frac{710}{2088}$  or  $\frac{67}{140} + \frac{14}{85}$