

Feedback from Methods Test 2

1. a) several used \geq instead of \neq
b) most got domain but were confused with range. Plug in a variety of values for x to see a trend. Ie $x = -100, -10, 0, 10, 100$. You should see that the fraction will approach zero from the positive side with the positive and negative values of x and the maximum it can be is when $x=0$ which is $\frac{1}{2}$
2. a) many used $-6x$ not $+6x$ when expanding the bracket
b) again using a negative not a positive when expanding bracket
Not multiplying every term by 14, many left the 1 as 1 and only multiplied the fractions.
3. a) (i) many found $\frac{f(1)}{3}$ instead of $3f(1)$
(ii) not using a bracket around the $g(2)$ when subtracting
b) many solved for t not x
many solved for $f(17)$ not $f(t)=17$
c) many didn't recognise that if integers are the domain, there will be a fixed number of values in the range.
Many included -2 and 3 in the domain instead of using $x = -1, 0, 1, 2$ only to get the range.
d) several students tried to complete the square to get the TP rather than use $\frac{-b}{2a}$ to get the LoS and subs this in to get y .
Forgetting to state that it was a max
Not showing correct y int
Not extending parabola through the plane
4. a) many forgetting to solve for a in $y = ax^2 + bx + c$
b) many didn't use the factorised form to write equation
5. mostly well done. Some students confused C as $-3x + y = 5$ not $3x + y = 5$
6. a) well done
b) well done
c) not rearranging the table so that x values increase by 1. This question was straight out of the text book.
7. spent too much time on these questions and used x and y rather than P and t
8. spent too long on small questions and didn't use e-activities or solve on classpad
9. didn't solve on classpad
10. (minus 1 per error) many not recognising what makes a function
11. didn't answer the question and didn't find the gradient. Or many said gradient was $x = \dot{}$ or $y = \dot{}$ not $m = \dot{}$
12. ran out of time. This question should have been completed first as it is straight off Classpad.