Latihan 1

Dua kelas akselerasi yang masing-masing terdiri dari 25 orang di salah satu SMA di kota Surakarta diberi pembelajaran dengan model Problem Based Learning (PBL) CIBI. Selama pembelajaran dinilai kerajinan belajarnya. Setelah satu semester diambil data hasil ujian akhir semesternya (UAS). Data disimpan dalam file ujian remidi (excel).

Berdasarkan data tersebut:

1. Tentukan statistik deskriptif penelitian ini!
2. Judul penelitian apa yang esuai dengan kasus tersebut?
3. Buatlah hipotesis penelitian ini.
4. Ujilah hipotesis tersebut berdasarkan prasyarat analisis!

Simpan hasil pekerjaan dalam satu folder sesuai nama anda.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Kelas IPA 1 |  |  |  | Kelas IPA 2 | |
|  |  |  |  |  |  |
| UAS | SKOR KERAJINAN BELAJAR |  |  | UAS | SKOR KERAJINAN BELAJAR |
| 64 | 8 |  |  | 77 | 4 |
| 87 | 6 |  |  | 74 | 7 |
| 98 | 8 |  |  | 65 | 5 |
| 54 | 7 |  |  | 54 | 5 |
| 65 | 6 |  |  | 87 | 6 |
| 74 | 4 |  |  | 95 | 7 |
| 68 | 3 |  |  | 62 | 5 |
| 98 | 8 |  |  | 52 | 3 |
| 45 | 6 |  |  | 45 | 2 |
| 46 | 5 |  |  | 65 | 3 |
| 57 | 6 |  |  | 25 | 2 |
| 57 | 3 |  |  | 74 | 4 |
| 56 | 4 |  |  | 85 | 6 |
| 53 | 5 |  |  | 68 | 5 |
| 54 | 6 |  |  | 68 | 5 |
| 51 | 4 |  |  | 84 | 8 |
| 68 | 6 |  |  | 65 | 3 |
| 72 | 8 |  |  | 75 | 7 |
| 75 | 9 |  |  | 77 | 8 |
| 86 | 9 |  |  | 54 | 4 |
| 95 | 7 |  |  | 65 | 4 |
| 84 | 8 |  |  | 74 | 5 |
| 56 | 4 |  |  | 65 | 3 |
| 87 | 5 |  |  | 84 | 7 |
| 82 | 6 |  |  | 62 | 3 |
|  |  |  |  |  |  |

Latihan 2

**PEMBELAJARAN FISIKA DENGAN METODE EKSPERIMEN DAN PROYEK DITINJAU DARI GAYA BELAJAR DAN KEMAMPUAN AWAL SISWA**

Penelitian ini bertujuan untuk mengetahui pengaruh metode eksperimen dan proyek ditinjau dari gaya belajar dan kemampuan awal siswa terhadap prestasi belajar siswa. Penelitian ini merupakan penelitian eksperimen. Populasi adalah seluruh siswa kelas X semester II Salah satu SMA Negeri di Surakarta tahun pelajaran 2011/2012, sejumlah 10 kelas. Sampel penelitian ditentukan secara acak dengan teknik *cluster random sampling* terdiri dari dua kelas. Satu kelas eksperimen pertama dengan metode eksperimen dan kelas lain dengan proyek. Teknik pengumpulan data menggunakan tes untuk prestasi belajar, angket untuk gaya belajar dan interaksi sosial. Data selengkapnya pada file excel.xlsx

Gaya belajar dibagi menjadi dua yaitu kinestetik dan visual. Jika skor kinestetik lebih dari atau sama dengan visual maka siswa dikategorikan memiliki gaya belajar kinestetik. Sedangkan kemampuan awal dikategorikan tinggi, sedang dan rendah. Kategori tinggi jika skor kemampuan awal lebih atau sama dengan rerata + 0,3 Standar Deviasi, Kategori rendah jika skor kemampuan awal kurang atau sama dengan rerata - 0,3 Standar Deviasi, selain itu sedang.

Berdasarkan data diatas:

1. Buatlah hipotesis penelitian ini
2. Analisislah secara diskriptif data hasil penelitian ini.
3. Apakah ada pengaruh kemampuan awal terhadap prestasi belajar siswa?
4. Apakah ada pengaruh metode terhadap prestasi belajar siswa
5. Apakah ada pengaruh Gaya belajar terhadap prestasi belajar siswa?

Semua pekerjaan di selesaikan dalam satu folder dengan nama anda.

Latihan 2

**Data**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| REKAP HASIL KEMAMPUAN AWAL , GAYA BELAJAR DAN TES PRESTASI BELAJAR SISWA | | | | | | | | | | | |
| SMA KOTA SURAKARTA TAHUN PELAJARAN 2011/2012 | | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |
| NO | NAMA SISWA | KELAS | METODE | Kemampuan | Kriteria | Kode | GAYA BELAJAR | | Kriteria | Kode | NILAI TES |
| Awal | KA | Visual | Kinestetik | GB | PRESTASI |
| 1 | Andrias Nyoto Widodo | X B | Eksperimen | 65 |  |  | 68 | 84 |  |  | 77 |
| 2 | Davin Listian CS | X B | Eksperimen | 80 |  |  | 81 | 80 |  |  | 67 |
| 3 | Denny Adipermana | X B | Eksperimen | 70 |  |  | 89 | 78 |  |  | 63 |
| 4 | Dinda Ayu PS | X B | Eksperimen | 65 |  |  | 85 | 79 |  |  | 73 |
| 5 | Dyah Isti Widya | X B | Eksperimen | 50 |  |  | 73 | 82 |  |  | 87 |
| 6 | Ela Anggi Prismadani | X B | Eksperimen | 60 |  |  | 77 | 76 |  |  | 73 |
| 7 | Elisabeth Nofalia Novi A | X B | Eksperimen | 65 |  |  | 82 | 80 |  |  | 70 |
| 8 | Febbyola Venta Sheylla Dewi | X B | Eksperimen | 80 |  |  | 85 | 75 |  |  | 60 |
| 9 | Guruh Ari P | X B | Eksperimen | 65 |  |  | 82 | 70 |  |  | 77 |
| 10 | Iandika PT | X B | Eksperimen | 75 |  |  | 89 | 79 |  |  | 77 |
| 11 | Ika Sulistyaningsih | X B | Eksperimen | 60 |  |  | 85 | 77 |  |  | 80 |
| 12 | Isana Fery Aldianto | X B | Eksperimen | 60 |  |  | 79 | 74 |  |  | 57 |
| 13 | Jefri Saputra | X B | Eksperimen | 60 |  |  | 82 | 81 |  |  | 60 |
| 14 | Jhodi Yuswanto | X B | Eksperimen | 55 |  |  | 73 | 82 |  |  | 60 |
| 15 | Kartika Aprina | X B | Eksperimen | 55 |  |  | 84 | 77 |  |  | 77 |
| 16 | Leonard Aprille E | X B | Eksperimen | 70 |  |  | 73 | 89 |  |  | 73 |
| 17 | Nicodemus Gery | X B | Eksperimen | 55 |  |  | 78 | 73 |  |  | 80 |
| 18 | Nilla K | X B | Eksperimen | 55 |  |  | 72 | 87 |  |  | 80 |
| 19 | Novia Fransisca | X B | Eksperimen | 70 |  |  | 71 | 72 |  |  | 60 |
| 20 | Novita Dian M | X B | Eksperimen | 75 |  |  | 85 | 68 |  |  | 67 |
| 21 | Pungky Rivida S | X B | Eksperimen | 70 |  |  | 81 | 78 |  |  | 70 |
| 22 | Ra. Lely Purnama Sari | X B | Eksperimen | 80 |  |  | 68 | 78 |  |  | 90 |
| 23 | Rachel Nesya Effendi | X B | Eksperimen | 75 |  |  | 74 | 68 |  |  | 70 |
| 24 | Shinta Erry Y | X B | Eksperimen | 60 |  |  | 85 | 74 |  |  | 83 |
| 25 | Silvia Margaretha | X B | Eksperimen | 60 |  |  | 78 | 77 |  |  | 67 |
| 26 | Tesa Lonika Barli Putri | X B | Eksperimen | 80 |  |  | 72 | 78 |  |  | 60 |
| 27 | Theosilus Yoga Christadi | X B | Eksperimen | 75 |  |  | 81 | 72 |  |  | 73 |
| 28 | Veronika R | X B | Eksperimen | 70 |  |  | 85 | 81 |  |  | 83 |
| 29 | Yoga Ndaru Wicaksono | X B | Eksperimen | 70 |  |  | 77 | 74 |  |  | 63 |
| 30 | Yohana Kus Hariyati | X B | Eksperimen | 65 |  |  | 84 | 77 |  |  | 80 |
| 31 | Yulyana W | X B | Eksperimen | 70 |  |  | 81 | 82 |  |  | 63 |
| 32 | Anthony | X B | Eksperimen | 70 |  |  | 84 | 81 |  |  | 73 |
| 33 | Alipfah Widiawati | X C | Eksperimen | 70 |  |  | 73 | 82 |  |  | 97 |
| 34 | Amanda Nabella Viska | X C | Eksperimen | 60 |  |  | 78 | 77 |  |  | 67 |
| 35 | Amanto Artika N | X C | Eksperimen | 55 |  |  | 72 | 82 |  |  | 60 |
| 36 | Andhika Bayu P | X C | Eksperimen | 60 |  |  | 68 | 76 |  |  | 70 |
| 37 | Angger Arum P | X C | Eksperimen | 50 |  |  | 78 | 82 |  |  | 67 |
| 38 | Anggit Vergiana WB | X C | Eksperimen | 60 |  |  | 78 | 79 |  |  | 67 |
| 39 | Arlin Yeni A | X C | Eksperimen | 65 |  |  | 68 | 88 |  |  | 70 |
| 40 | Ayuk Octavia | X C | Eksperimen | 60 |  |  | 74 | 78 |  |  | 80 |
| 41 | Desilia Putri Rosiana | X C | Eksperimen | 55 |  |  | 77 | 78 |  |  | 73 |
| 42 | Eka Nur Fitriana | X C | Eksperimen | 60 |  |  | 78 | 83 |  |  | 70 |
| 43 | Erich NL P | X C | Eksperimen | 70 |  |  | 72 | 68 |  |  | 67 |
| 44 | Febrian Valentino C | X C | Eksperimen | 55 |  |  | 81 | 74 |  |  | 60 |
| 45 | Ferina R | X C | Eksperimen | 70 |  |  | 74 | 77 |  |  | 60 |
| 46 | Hengky NP | X C | Eksperimen | 55 |  |  | 77 | 83 |  |  | 83 |
| 47 | Herlambang Yuda | X C | Eksperimen | 65 |  |  | 74 | 72 |  |  | 53 |
| 48 | Juvita DH | X C | Eksperimen | 55 |  |  | 81 | 75 |  |  | 70 |
| 49 | Lily Indrawati S | X C | Eksperimen | 50 |  |  | 85 | 82 |  |  | 63 |
| 50 | Marita Fitriana S | X C | Eksperimen | 70 |  |  | 77 | 73 |  |  | 90 |
| 51 | Michael Hudson Lawrence | X C | Eksperimen | 65 |  |  | 82 | 84 |  |  | 70 |
| 52 | Moch. Aziz Nur | X C | Eksperimen | 55 |  |  | 76 | 73 |  |  | 53 |
| 53 | Moga Angger | X C | Eksperimen | 70 |  |  | 82 | 78 |  |  | 67 |
| 54 | Muhamat Fajar Hidayatulloh | X C | Eksperimen | 80 |  |  | 72 | 83 |  |  | 57 |
| 55 | Nadya Gusti Pramita | X C | Eksperimen | 70 |  |  | 77 | 68 |  |  | 47 |
| 56 | Nuri Wijayanti | X C | Eksperimen | 65 |  |  | 78 | 75 |  |  | 67 |
| 57 | Pipit Yulianti | X C | Eksperimen | 75 |  |  | 72 | 87 |  |  | 77 |
| 58 | Prasongko Yogyo W | X C | Eksperimen | 65 |  |  | 81 | 68 |  |  | 83 |
| 59 | Refvy T Panghuripan | X C | Eksperimen | 75 |  |  | 88 | 74 |  |  | 63 |
| 60 | Rohman Wahid Pambudi | X C | Eksperimen | 75 |  |  | 84 | 78 |  |  | 87 |
| 61 | Sebastian Billy K | X C | Eksperimen | 75 |  |  | 81 | 78 |  |  | 70 |
| 62 | Shinta N Dewi | X C | Eksperimen | 70 |  |  | 86 | 70 |  |  | 80 |
| 63 | Vijar Prasetya S | X C | Eksperimen | 70 |  |  | 73 | 80 |  |  | 73 |
| 64 | Wijaya Gunarto P | X C | Eksperimen | 65 |  |  | 84 | 74 |  |  | 90 |
| 65 | Yani Widyawati | X C | Eksperimen | 70 |  |  | 74 | 77 |  |  | 80 |
| 66 | Y Chandra Ningrum | X C | Eksperimen | 70 |  |  | 71 | 74 |  |  | 93 |
| 67 | Yosua Eva NS | X C | Eksperimen | 65 |  |  | 78 | 81 |  |  | 77 |
| 68 | Agiem Christian | X D | Proyek | 80 |  |  | 85 | 78 |  |  | 67 |
| 69 | Agustinus Tommy W | X D | Proyek | 65 |  |  | 76 | 70 |  |  | 60 |
| 70 | Ahmad D | X D | Proyek | 70 |  |  | 75 | 80 |  |  | 83 |
| 71 | Alpika Wijayanti | X D | Proyek | 65 |  |  | 80 | 74 |  |  | 77 |
| 72 | Andarika MK | X D | Proyek | 65 |  |  | 73 | 77 |  |  | 60 |
| 73 | Beni Priyambodo | X D | Proyek | 75 |  |  | 84 | 74 |  |  | 80 |
| 74 | Catarina Emeralda KAY | X D | Proyek | 70 |  |  | 73 | 81 |  |  | 77 |
| 75 | Dini Widiyastuti | X D | Proyek | 55 |  |  | 78 | 73 |  |  | 90 |
| 76 | Elok Rohmawati | X D | Proyek | 65 |  |  | 72 | 84 |  |  | 67 |
| 77 | Gusti Stefan N | X D | Proyek | 65 |  |  | 68 | 73 |  |  | 77 |
| 78 | Hartanley Sudito | X D | Proyek | 75 |  |  | 78 | 74 |  |  | 83 |
| 79 | Herma Rizqi S | X D | Proyek | 75 |  |  | 78 | 86 |  |  | 63 |
| 80 | Irvan Tri Setiyawan | X D | Proyek | 70 |  |  | 68 | 70 |  |  | 87 |
| 81 | Ita Winda N | X D | Proyek | 65 |  |  | 74 | 84 |  |  | 60 |
| 82 | Jose Fernando | X D | Proyek | 80 |  |  | 77 | 78 |  |  | 80 |
| 83 | M Dior Bogeri | X D | Proyek | 75 |  |  | 78 | 68 |  |  | 73 |
| 84 | Margo Rudy H | X D | Proyek | 70 |  |  | 81 | 74 |  |  | 90 |
| 85 | Maria HK | X D | Proyek | 80 |  |  | 81 | 77 |  |  | 80 |
| 86 | Megawati | X D | Proyek | 75 |  |  | 90 | 78 |  |  | 90 |
| 87 | Michelle Octa CT | X D | Proyek | 70 |  |  | 87 | 72 |  |  | 70 |
| 88 | Mohamad Rizal | X D | Proyek | 60 |  |  | 73 | 81 |  |  | 63 |
| 89 | Muhammad Makardia | X D | Proyek | 80 |  |  | 78 | 74 |  |  | 87 |
| 90 | Nona Aviano | X D | Proyek | 75 |  |  | 82 | 77 |  |  | 87 |
| 91 | Noris Wahyu S | X D | Proyek | 80 |  |  | 76 | 74 |  |  | 60 |
| 92 | Puji Pratiwi | X D | Proyek | 75 |  |  | 82 | 79 |  |  | 87 |
| 93 | R Gregorius A | X D | Proyek | 75 |  |  | 79 | 77 |  |  | 77 |
| 94 | Rendra Wahyu | X D | Proyek | 70 |  |  | 85 | 81 |  |  | 83 |
| 95 | Riyan Enggar RR | X D | Proyek | 85 |  |  | 67 | 77 |  |  | 87 |
| 96 | Sindi AM | X D | Proyek | 75 |  |  | 72 | 82 |  |  | 77 |
| 97 | Sofyan Hamid | X D | Proyek | 75 |  |  | 81 | 79 |  |  | 67 |
| 98 | Steffani Rizkyawan | X D | Proyek | 70 |  |  | 74 | 82 |  |  | 83 |
| 99 | Tirta P Ayu H | X D | Proyek | 80 |  |  | 77 | 79 |  |  | 63 |
| 100 | Yonathan Setiawan | X D | Proyek | 75 |  |  | 74 | 88 |  |  | 87 |
| 101 | Lidwina Nastiti H | X D | Proyek | 70 |  |  | 82 | 78 |  |  | 70 |
| 102 | Akbar Romadon | X F | Proyek | 65 |  |  | 82 | 77 |  |  | 80 |
| 103 | Antin Rahmaria | X F | Proyek | 70 |  |  | 77 | 84 |  |  | 73 |
| 104 | Ayu Yuli KC | X F | Proyek | 65 |  |  | 82 | 70 |  |  | 90 |
| 105 | Bangkit Tri P | X F | Proyek | 70 |  |  | 76 | 79 |  |  | 67 |
| 106 | Binar Pradana P | X F | Proyek | 70 |  |  | 82 | 77 |  |  | 63 |
| 107 | Carissa Amalia H | X F | Proyek | 70 |  |  | 79 | 74 |  |  | 57 |
| 108 | David Cornelius | X F | Proyek | 55 |  |  | 88 | 78 |  |  | 60 |
| 109 | Disma Erlinda F | X F | Proyek | 60 |  |  | 78 | 85 |  |  | 93 |
| 110 | Eko Defriatno | X F | Proyek | 65 |  |  | 84 | 83 |  |  | 83 |
| 111 | Fernanda Aditia P | X F | Proyek | 75 |  |  | 78 | 82 |  |  | 73 |
| 112 | Fitria W | X F | Proyek | 75 |  |  | 82 | 76 |  |  | 70 |
| 113 | Hagmy Nurma YS | X F | Proyek | 70 |  |  | 84 | 82 |  |  | 73 |
| 114 | Nesti Eko S | X F | Proyek | 65 |  |  | 80 | 84 |  |  | 80 |
| 115 | Maha Hendrick AC | X F | Proyek | 65 |  |  | 84 | 76 |  |  | 73 |
| 116 | Maharani W | X F | Proyek | 75 |  |  | 74 | 86 |  |  | 83 |
| 117 | Margareta Mega TA | X F | Proyek | 70 |  |  | 73 | 85 |  |  | 90 |
| 118 | Martha Mustika D | X F | Proyek | 80 |  |  | 82 | 81 |  |  | 97 |
| 119 | Masda Indra W | X F | Proyek | 65 |  |  | 88 | 89 |  |  | 80 |
| 120 | Nabila Warda P | X F | Proyek | 60 |  |  | 78 | 86 |  |  | 67 |
| 121 | Peter Antonius G | X F | Proyek | 55 |  |  | 78 | 73 |  |  | 53 |
| 122 | Prilanita Herdian | X F | Proyek | 75 |  |  | 80 | 75 |  |  | 87 |
| 123 | Ramardka Demina Chally W | X F | Proyek | 80 |  |  | 74 | 82 |  |  | 70 |
| 124 | Riandika YH | X F | Proyek | 75 |  |  | 72 | 78 |  |  | 60 |
| 125 | Riyo Priar Artanto | X F | Proyek | 70 |  |  | 78 | 81 |  |  | 90 |
| 126 | Romalasari SS | X F | Proyek | 65 |  |  | 80 | 79 |  |  | 77 |
| 127 | Silvana Melisa | X F | Proyek | 75 |  |  | 81 | 85 |  |  | 63 |
| 128 | Silviani Rosiana P | X F | Proyek | 75 |  |  | 82 | 67 |  |  | 80 |
| 129 | Tegar AP | X F | Proyek | 80 |  |  | 74 | 73 |  |  | 63 |
| 130 | Thomas Damar BP | X F | Proyek | 75 |  |  | 80 | 84 |  |  | 77 |
| 131 | Wahyu Firmanningtyas | X F | Proyek | 65 |  |  | 78 | 74 |  |  | 87 |
| 132 | Widya Aryoko W | X F | Proyek | 80 |  |  | 82 | 71 |  |  | 57 |
| 133 | Yoga Maskur Efendi | X F | Proyek | 65 |  |  | 76 | 78 |  |  | 70 |
| 134 | Yoshua Glennardo | X F | Proyek | 75 |  |  | 82 | 85 |  |  | 63 |
| 135 | Zindy Xarresa | X F | Proyek | 65 |  |  | 79 | 75 |  |  | 90 |
|  | RATA-RATA |  |  |  |  |  |  |  |  |  |  |
|  | StandarDeviasi |  |  |  |  |  |  |  |  |  |  |
|  | Rata-rata +0,3\*STDEV |  |  |  |  |  |  |  |  |  |  |
|  | Rata-rata - 0,3\*STDEV |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | Kemampuan Awal: |  | Gaya Belajar: |  |  |  |  |  |  |  |  |
|  | 1 = Tinggi |  | 1 = Visual |  |  |  |  |  |  |  |  |
|  | 2 = Sedang |  | 2 = Kinestetik |  |  |  |  |  |  |  |  |
|  | 3 = Rendah |  |  |  |  |  |  |  |  |  |  |